

HP StoreVirtual Storage Command-Line Interface User Guide

This guide provides information for using the command-line interface provided with the HP StoreVirtual Storage software. Command syntax is included, along with a link to sample scripts available from the HP website.



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Overview

The LeftHand OS command-line interface (CLI) is built upon the API released with version 8.x. Develop your own automation, scripting and management using the CLI.

- For instructions about using the CLI, see the Syntax section.
- The section on Global Parameters describes functionality that applies to the entire CLI and includes commands to customize global operations.

System Requirements

Windows Server 2003 SP1
Windows Server 2003 R2
Windows Server 2008 R2, SP1, and SP2
Windows XP SP2
Windows Vista
Windows 7
Windows Server 2012
10 MB available space

Installing the CLI

Install the CLI from the Management Software DVD. The installation wizard automatically installs the command-line software to the following default location in Windows and sets the environment variable:
C:\Program Files\HP\StoreVirtual\CLI

Sample Scripts

You can obtain sample scripts from the HP website:
<http://www.hp.com/go/StoreVirtualDownloads>

On-System CLI

The CLI is installed on storage systems and can be accessed by SSH:

- Log in to the on-system CLI using the system IP address and the designated port 16022
- If logging in from a command line, you must type the following command:
`ssh -p 16022 -l <user> <NSM-IP>`

Concurrent CLI commands

No more than five concurrent commands from distinct users should be sent to a single storage system. Users can experience timeouts and performance declines with the sixth concurrent command. For example, CLI commands from users Sue, Bob, Jim, Alan, and Les can be received and serviced by a single storage system simultaneously. However, adding a sixth simultaneous command from Steve could result in a timeout or performance decline for any of the users.

More than five simultaneous commands can be achieved by distributing CLI sessions across each storage system in a management group. For example, in a three-node management group, six unique users can simultaneously send commands by distributing them as follows:

- Sue and Bob send commands to StorageSystem-1
- Jim and Alan send commands to StorageSystem-2
- Les and Steve send commands to StorageSystem-3

Global Parameters

prompt=<true | false>

Some potentially destructive commands prompt before proceeding. This default behavior can be turned off by specifying "prompt=false".

output=<XML | Normal>

In the default case, the CLI returns information to standard output, formatted in a way that's easy to read rather than easy to parse. The XML setting returns all output information as an XML document, allowing easier parsing of the result. There is no guarantee that newer versions of the API will preserve the same formatting in the default case. It is strongly discouraged to use this form of the CLI programmatically. If the output needs to be parsed, the XML variant is preferred.

separator=<c>

Some CLI parameters comprise parameters for multiple operations. For example, the "snapshotVolumes" command allows the user to specify simultaneous snapshotting of multiple volumes. In this scenario, some parameters specify an ordered list that apply to each snapshot in succession

```
description="This applies to snapshot1;This applies to snapshot2"
```

The default separator character is a semicolon (';'). If the same character is used in the body of a parameter then separator can be changed to something else.

```
description="This applies to snapshot1;This applies to snapshot2"
```


Syntax

CLIQ is the command-line interface (CLI) for the HP StoreVirtual Storage Solution. The CLI specifies parameters in the form `parameter=<parameter>` (specification), rather than dictating a particular order (positional) notation.

Parameter ordering

Ordering of parameters is not specified. Any order will do. For example:

```
cliq deleteVolume volumeName=theVolume userName=user passWord=secret  
login=10.1.2.3
```

is equivalent to

```
cliq deleteVolume login=10.1.2.3 passWord=secret userName=user  
volumeName=theVolume
```

The method parameter may be optionally specified as `"method=<command>":`

```
cliq userName=user passWord=secret login=10.1.2.3 volumeName=theVolume  
method=deleteVolume
```

Parameter types

Each parameters has a given type indicating how to use it. The available types are:

- Required - the parameter must be included for the command to execute
- Optional - the parameter can be included but is not necessary for the command to execute
- Conditional - A combination of conditional parameters must be included for the command to execute

Case sensitivity

This section is applicable to languages that have a notion of case sensitivity. All commands and parameter names are case-insensitive. "createVolume" is the same as "CreateVolume" is the same as "CREATEVOLUME". In some cases, parameter values, while not sensitive, are case significant as the system will preserve the case specified. For example, the description parameter value in the createVolume command will preserve the case specified by the caller, and impose this on the newly created volume.

True/False

Any parameter that indicates true/false, may be specified as "1|0" or "true|false".

Command abbreviation

There is no command or parameter abbreviation in the CLI when scripted. All commands and parameter names must be fully specified. This is to prevent ambiguity in legacy scripts if new commands or parameters are added.

OS error code integration

The CLI will map error codes to reasonable OS status codes (status in Linux, ERRORLEVEL in DOS). Since these are limited to 0..255, some of the OS errors may have less granularity than the API error codes.

Composite commands

Some commands take multiple elements for the parameter value. In this case, the parameter is interpreted as an delimiter-separated ordered list. For example:

```
volumeName=volume1;volume2  
login=10.0.1.2;10.1.2.3;10.2.3.4
```


If a parameter contains fewer elements in the list than needed for the composite command, the last one in the list will be repeated. There must be at least one element in the list, if it's required.

Size specification

When volume sizes or thresholds are specified, the format is <size><units>, where units are:

- MB - megabytes (2^{20})
- GB - gigabytes (2^{30})
- TB - terabytes (2^{40})

There is no default for size units - the units must be specified. These are defined as International System of Units (SI) for file storage (popular use).

Some values may be specified as either a size or percentage, for example, reserveQuota. The units will determine how this is interpreted. For example:

- 10MB - 1,048,576 bytes
- 10GB - 10,737,418,240 bytes
- 10% - 1/10 of the current volume size

Password prompt

When credentials are required in the CLI, you may not want to display the password by typing the "password=" parameter. If the username parameter is specified without the password parameter, you will be prompted interactively for the password. This password will not be displayed.

```
cliq getGroupInfo login=10.0.1.2 username=admin  
password: *****
```

DNS names

You can also specify managers as a host name, provided they can be resolved by DNS:

```
cliq getGroupInfo login=Exchange-1 username=admin password=secret
```

Storage System CLI

When commands are executed on the storage systems (via SSH), no authentication parameters are required:

```
getGroupInfo
```

Concurrent CLIQ commands

No more than 5 concurrent commands from distinct users should be sent to a single NSM. Users can experience timeouts and performance declines with the 6th concurrent command. For example, CLIQ commands from users Sue, Bob, Jim, Alan, and Les can be received and serviced by a single NSM simultaneously; however, adding a 6th simultaneous command from Steve could result in a timeout or performance decline for any of the users.

More than 5 simultaneous commands can be achieved by distributing CLIQ sessions across each NSM in a management group. For example, in a 3-node management group, 6 unique users can simultaneously send commands by distributing them as follows:

- Sue and Bob send commands to NSM 1
- Jim and Alan send commands to NSM 2
- Les and Steve send commands to NSM 3

Integrated command shell

The CLIQ command line has an integrated shell that's executed by default when connecting directly to a storage system, or running cliq.exe without any parameters:


```
>cliq
HP StoreVirtual LeftHand OS Command Line Interface, v10.5 (type exit to quit)
(C) Copyright 2007-2013 Hewlett-Packard Development Company, L.P.

CLIQ>
```

The integrated shell supports rich command line editing features specific to the HP StoreVirtual API. The following editing keys are supported:

| Key | Meaning |
|-----------|---|
| LEFT | Moves the cursor one space to the left. |
| RIGHT | Moves the cursor one space to the right. |
| BACKSPACE | Deletes the character under the cursor and moves the cursor to the left. |
| DELETE | Deletes the character under the cursor. |
| UP | Recalls the previous command entered. |
| DOWN | Recalls the first command entered. |
| HOME | Moves the cursor to the beginning of the line. |
| END | Moves the cursor to the end of the line. |
| ESCAPE | Clears the current command line. |
| INSERT | Toggles between insert mode (the default) and overwrite mode. |
| TAB | Completes the command. If the command method is not yet fully resolved, repeated TAB keys will cycle through the possible command methods (SHIFT-TAB will cycle in reverse). If the method is fully resolved, then parameters associated with that command will be proposed. The parameters suggested start with those required for the command, followed by optional parameters. No mutually exclusive parameters will be suggested. |
| !# | Recalls the command from the previous command list by number - for example: !3 will recall the 3rd command from the command list. |

Return Codes

All GAUCHE commands return an XML response containing a 32-bit result code, and a description of the result. Example:

```
<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<gauche version="1.0">
  <response description="Succeeded" result="0"/>
</gauche>
```

Success results are nonnegative values, while negative values indicate an error. Many errors returned by LeftHand OS and Hydra unfortunately do not return ordinal values that can be conveniently mapped into an API and CLI return code. In all cases, we can return the error description string, but it won't be feasible to return a sensible ordinate value (other than `GaucheGeneralError`) without parsing the description string.

| Result | Value | OS Status | Description |
|------------------------|------------|-----------|--|
| ClqSuccess | 0 | 0 | Everything succeeded normally |
| ClqNothingDone | 1 | 1 | Operation has succeeded, but nothing was done (the system was already in the requested state). |
| ClqOperationPending | 2 | 2 | Operation has not failed, but is not yet complete. The "handle" parameter contains a value that can be used to query and cancel the operation. |
| ClqOperationAbandoned | 3 | 3 | Operation was cancelled or abandoned. |
| ClqNothingFound | 4 | 4 | Operation found no objects. |
| ClqSnapshotSet | 5 | 5 | This snapshot was a part of the snapshot set. |
| ClqVssSnapshotWarning | 6 | 6 | Warning: The writer operation failed. |
| ClqPITSnapshotWarning | 7 | 7 | Warning: Point in time snapshot is created. |
| ClqParameterIgnored | 8 | 8 | The operation succeeded but a parameter was ignored as it is not applicable. |
| ClqUnexpected | 0x80001001 | 128 | An unexpected error has occurred. |
| ClqXmlError | 0x80001002 | 129 | The XML given is not well-formed. |
| ClqParameterFormat | 0x80001003 | 130 | The parameter is not specified correctly. |
| ClqParameterRepeat | 0x80001004 | 131 | A parameter is repeated. |
| ClqMissingMethod | 0x80001005 | 132 | The command method is missing. |
| ClqMissingParameter | 0x80001006 | 133 | One or more expected parameters are missing. |
| ClqUnrecognizedCommand | 0x80001007 | 134 | This command is unrecognized. |

| Result | Value | OS Status | Description |
|-----------------------------|------------|-----------|---|
| CliqUnrecognizedParameter | 0x80001008 | 135 | This parameter is unrecognized. |
| CliqIncompatibleParameters | 0x80001009 | 136 | Two or more parameters supplied are incompatible with each other. |
| CliqNotYetImplemented | 0x8000100A | 137 | This is a legal command - we just haven't done it yet. |
| CliqNoMemory | 0x8000100B | 138 | Out of memory. |
| CliqVolumeNotFound | 0x8000100C | 139 | Could not find the requested volume. |
| CliqVolumeInUse | 0x8000100D | 140 | The requested volume is in use. |
| CliqVolumeInitFailure | 0x8000100E | 141 | Volume initialization failed. |
| CliqUnrecognizedVolume | 0x8000100F | 142 | The volume is an unrecognized type. |
| CliqOperationFailed | 0x80001010 | 143 | General LeftHand OS error - the operation failed. |
| CliqCredentialsFailed | 0x80001011 | 144 | The supplied credentials are incorrect. |
| CliqInvalidParameter | 0x80001012 | 145 | Invalid parameter. |
| CliqObjectNotFound | 0x80001013 | 146 | Object not found. |
| CliqConnectionFailure | 0x80001014 | 147 | Failed to connect to the API server. |
| CliqNotEnoughSpace | 0x80001015 | 148 | Not enough space to complete the command. |
| CliqNoManager | 0x80001016 | 149 | Could not find a manager. |
| CliqSocketError | 0x80001017 | 150 | Network socket error. |
| CliqOperationTimedOut | 0x80001018 | 151 | Operation exceeded the specified timeout. |
| CliqNoPlatformSupport | 0x80001019 | 152 | This operating system type does not support the operation. |
| CliqNoPlatformSupport | 0x8000101A | 153 | This operating system version does not support the operation. |
| CliqUtilityNotFound | 0x8000101B | 154 | The utility command requested was not found. |
| CliqUtilityNotAllowed | 0x8000101C | 155 | The utility command requested is not in the allowed list. |
| CliqUtilityIllegalParameter | 0x8000101D | 156 | The utility command contains unsupported parameters or redirection. |
| CliqUtilityFailed | 0x8000101E | 157 | The utility command executed, but returned a non-zero status code. |
| CliqNodeNotFound | 0x8000101F | 158 | The specified storage system can't be found. |
| CliqIllegalUsername | 0x80001020 | 159 | The username must be 3..40 characters, starting with a letter. |

| Result | Value | OS Status | Description |
|-----------------------------|------------|-----------|--|
| CliqIllegalPassword | 0x80001021 | 160 | The password must be 5..40 characters, not / or :. |
| CliqFileError | 0x80001022 | 161 | General file error. |
| CliqMissingInitiator | 0x80001023 | 162 | No iSCSI initiator found. |
| CliqInitiatorStopped | 0x80001024 | 163 | The iSCSI initiator is not running. |
| CliqSanIqTooOld | 0x80001025 | 164 | The version of LeftHand OS software must be upgraded. |
| CliqDefaultAdmin | 0x80001026 | 165 | You cannot delete, modify permissions, or remove the last user from the default administration group. |
| CliqVssProviderNotInstalled | 0x80001027 | 166 | The HP StoreVirtual VSS Provider is not installed. |
| CliqVssProviderNotRunning | 0x80001028 | 167 | The HP StoreVirtual VSS Provider is not running. |
| CliqVolumeNoSessions | 0x80001029 | 168 | Cannot create an application-managed snapshot because there are no iSCSI connections associated with this volume. To create application-managed snapshots, there must be at least one application server associated with the volume via an iSCSI connection. The volume must be connected to a VSS-enabled server. |
| CliqVolumeMultipleSessions | 0x8000102A | 169 | Cannot create an application-managed snapshot because there is more than one IQN (iSCSI Qualified Name) associated with this volume. To create application-managed snapshots, there must be only one application server associated with the volume. |
| CliqNoVssCapabilities | 0x8000102B | 170 | Cannot create an application-managed snapshot because the server does not support this capability. |
| CliqServerUnresponsive | 0x8000102C | 171 | Cannot create an application-managed snapshot because the system could not communicate to the necessary software component on the application server. |
| CliqVssSnapshotFailed | 0x8000102D | 172 | Cannot create an application-managed snapshot because the system could not quiesce the application associated with this volume. |

| Result | Value | OS Status | Description |
|-----------------------------|------------|-----------|---|
| CliqVssLunInfoFailed | 0x8000102E | 173 | Cannot create an application-managed snapshot because the system failed to get LUN data. |
| CliqVssWriterUnavailable | 0x8000102F | 174 | The VSS writer operation failed. |
| CliqSnapshotInProgress | 0x80001030 | 175 | Another app-managed snapshot is in progress. |
| CliqWindowsServerIsBusy | 0x80001031 | 176 | The application server is busy. |
| CliqUpdateVssProvider | 0x80001032 | 177 | This version of VSS provider must be upgraded. |
| CliqVssOperationTimedOut | 0x80001033 | 178 | VSS operation timed out. |
| CliqVolumeConnectionFailure | 0x80001034 | 179 | Volume connection failure. |
| CliqServerInCluster | 0x80001035 | 180 | Server is in Cluster and cannot be changed via CliQ. |
| CliqVolumeError | 0x80001036 | 181 | Volume error. |
| CliqVolumeNoServer | 0x80001037 | 182 | Failed to contact Application Aware Snapshot Manager. |
| CliqUnsupportedApplication | 0x80001038 | 183 | This application is not supported. |
| CliqServerVersionMismatch | 0x80001039 | 184 | Server version is not compatible. |
| CliqSnapshotNameExists | 0x8000103A | 185 | The snapshot with this name already exists. |
| CliqVolumeInvalidSet | 0x8000103B | 186 | Invalid volume set. |
| CliqNoVirtualManager | 0x8000103C | 187 | A Virtual Manager was not found. |
| CliqIllegalUserGroupName | 0x8000103D | 188 | Username must be 3..40 characters a-z, 0-9, - or _, first character must be a lower-case letter a-z. |
| CliqIllegalUserDescription | 0x8000103E | 189 | Username must be 3..40 characters A-Z, a-z, 0-9, - or _, first character must be a letter A-Z or a-z. |
| CliqIllegalIQN | 0x8000103F | 190 | IQN must be letters or numbers or - or . or : characters. |
| CliqIllegalWWN | 0x80001040 | 191 | WWN must be 16 Hex letters or numbers (A-F, 0-9) or : character. |
| CliqHbaError | 0x80001041 | 192 | HBA status error. |
| CliqHbaNotSupported | 0x80001042 | 193 | HBA function not supported. |
| CliqHbaInvalidHandle | 0x80001043 | 194 | HBA function, invalid handle. |
| CliqHbaInvalidArgument | 0x80001044 | 195 | HBA function, bad argument. |
| CliqHbaIllegalWWN | 0x80001045 | 196 | WWN not recognized. |
| CliqHbaIllegalIndex | 0x80001046 | 197 | HBA function, Index not recognized. |
| CliqHbaMoreData | 0x80001047 | 198 | HBA function, larger buffer required. |

| Result | Value | OS Status | Description |
|---------------------------|------------|-----------|--|
| CliqHbaStaleData | 0x80001048 | 199 | Information has changed since the last call to HBA_RefreshInformation. |
| CliqHbaScsiCheckCondition | 0x80001049 | 200 | SCSI Check Condition reported. |
| CliqHbaBusy | 0x8000104A | 201 | Adapter busy or reserved, retry may be effective. |
| CliqHbaTryAgain | 0x8000104B | 202 | Request timed out, retry may be effective. |
| CliqHbaUnavailable | 0x8000104C | 203 | Referenced HBA has been removed or deactivated. |
| CliqHbaElsReject | 0x8000104D | 204 | The requested ELS was rejected by the local adapter. |
| CliqHbaInvalidLun | 0x8000104E | 205 | The specified LUN is not provided by the specified adapter. |
| CliqHbaIncompatible | 0x8000104F | 206 | An incompatibility has been detected among the library and driver modules invoked which will cause one or more functions in the highest version that all support to operate incorrectly. |
| CliqHbaAmbitiousWWN | 0x80001050 | 207 | Multiple adapters have a matching WWN. This could occur if the NodeWWN of multiple adapters is identical. |
| CliqHbaLocalBus | 0x80001051 | 208 | A persistent binding request included a bad local SCSI bus number. |
| CliqHbaLocalTarget | 0x80001052 | 209 | A persistent binding request included a bad local SCSI target number. |
| CliqHbaLocalLun | 0x80001053 | 210 | A persistent binding request included a bad local SCSI logical unit number. |
| CliqHbaLocalScsildBound | 0x80001054 | 211 | A persistent binding set request included a local SCSI ID that was already bound. |
| CliqHbaTargetFcld | 0x80001055 | 212 | A persistent binding request included a bad or unlocatable FCP Target FCID. |
| CliqHbaTargetNodeWWN | 0x80001056 | 213 | A persistent binding request included a bad FCP Target Node WWN, |
| CliqHbaTargetPortWWN | 0x80001057 | 214 | A persistent binding request included a bad FCP Target Port WWN. |
| CliqHbaTargetLun | 0x80001058 | 215 | A persistent binding request included an FCP Logical Unit |

| Result | Value | OS Status | Description |
|------------------------------|------------|-----------|---|
| | | | Number not defined by the identified Target. |
| CliqHbaTargetLuid | 0x80001059 | 216 | A persistent binding request included an undefined or otherwise inaccessible Logical Unit Unique Identifier. |
| CliqHbaNoSuchBinding | 0x8000105A | 217 | A persistent binding remove request included a binding which did not match a binding established by the specified port. |
| CliqHbaNotTarget | 0x8000105B | 208 | A SCSI command was requested to an Nx_Port that was not a SCSI Target Port. |
| CliqHbaUnsupportedFc4 | 0x8000105C | 219 | A request was made concerning an unsupported FC-4 protocol. |
| CliqHbaIncapable | 0x8000105D | 220 | A request was made to enable unimplemented capabilities for a port. |
| CliqHbaTargetBusy | 0x8000105E | 221 | A SCSI function was requested at a time when issuing the requested command would cause a SCSI overlapped command condition (see SAM-3). |
| CliqHbaNotLoaded | 0x8000105F | 222 | A call was made to HBA_FreeLibrary when no library was loaded. |
| CliqHbaAlreadyLoaded | 0x80001060 | 223 | A call was made to HBA_LoadLibrary when a library was already loaded. |
| CliqHbaIllegalFcid | 0x80001061 | 224 | The Address Identifier specified in a call to HBA_SendRNIDV2 violates access control rules for that call. |
| CliqHbaAscsiDevice | 0x80001062 | 225 | Scsi device. |
| CliqHbaInvalidProtocolType | 0x80001063 | 226 | Invalid protocol. |
| CliqHbaBadEventType | 0x80001064 | 227 | Bad event type. |
| CliqMissingCIMProperty | 0x80001065 | 228 | An expected CIM property value was not found. |
| CliqSANiQFeatureNotSupported | 0x80001066 | 229 | The requested feature or operation is not supported. |
| CliqParameterDeprecated | 0x80001067 | 230 | The '%s' parameter has been deprecated. |
| CliqNodeNotInGroup | 0x80001068 | 231 | Node must be in a management group. |
| CliqRemoteSnapshotNotFound | 0x80001069 | 232 | The snapshot was not found |

| Result | Value | OS Status | Description |
|-------------------------|------------|-----------|---|
| CliqMultipleIPAddresses | 0x8000106A | 233 | Multiple IP addresses were encountered. |

Commands

addVirtualManager

This command adds a virtual manager to a group.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq addVirtualManager login= userName= passWord=
```

| | | |
|------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |

Example

```
cliq addVirtualManager login=10.0.1.2 userName=admin passWord=secret
cliq addVirtualManager
```

assignVolume

This command assigns a volume to a server. This assignment sets the access to a volume, based on host iqn(s). This command only supports iSCSI.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq assignVolume volumeName= initiator= login= userName= passWord=
```

| | | |
|-------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>volumeName</i> | Required | The name of the volume |
| <i>namePrefix</i> | Optional | A prefix string for newly created objects. A unique number value will be concatenated to this prefix to guarantee name uniqueness. |

| | | |
|------------------------|----------|---|
| <i>accessRights</i> | Optional | The access rights to the volume: r - read-only, x - no access, rw - read-write (default) |
| <i>initiator</i> | Optional | A semicolon delimited string of host IQN's. If this is not specified, the IQN of the local server is used (this parameter is required if run on a storage system). Valid characters are any letter, number, international character or '.', '.' and ':' characters. |
| <i>vipLoadBalance</i> | Optional | Use VIP load balancing for this host. This can be one of: 0 = disabled or 1 = enabled, 1 is the default. |
| <i>exclusiveAccess</i> | Optional | Remove any previous server access rights to this volume. This can be one of: 0 = disabled or 1 = enabled, 1 is the default |

Example

```
cliq assignVolume volumeName=TheVolume
initiator=iqn.1991-05.com.microsoft:w-gregorio.corp.hp.com
login=10.0.1.2 userName=admin passWord=secret

cliq assignVolume volumeName=TheVolume
initiator=iqn.1991-05.com.microsoft:w-gregorio.corp.hp.com
```

assignVolumeChap

This command assigns a volume to a server. This assignment sets the access to a volume, using CHAP authentication.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq assignVolumeChap volumeName= targetSecret= login= userName= passWord=
```

| | | |
|------------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters userName/passWord or groupName must be specified). |
| <i>volumeName</i> | Required | The name of the volume |
| <i>targetSecret</i> | Required | The CHAP target secret for the volume. |
| <i>namePrefix</i> | Optional | A prefix string for newly created objects. A unique number value will be concatenated to this prefix to guarantee name uniqueness. |
| <i>accessRights</i> | Optional | The access rights to the volume: r - read-only, x - no access, rw - read-write (default) |
| <i>chapName</i> | Optional | The CHAP name for the volume. If this is not specified, the IQN of the local server is used (this parameter is required if run on a storage system). |
| <i>initiatorSecret</i> | Optional | The CHAP initiator secret for the volume. |
| <i>vipLoadBalance</i> | Optional | Use VIP load balancing for this host. This can be one of: 0 = disabled or 1 = enabled, 1 is the default. |
| <i>exclusiveAccess</i> | Optional | Remove any previous server access rights to this volume. This can be one of: 0 = disabled or 1 = enabled, 1 is the default |

Example

```
cliq assignVolumeChap volumeName=TheVolume targetSecret=ItsASecret  
login=10.0.1.2 userName=admin passWord=secret  
  
cliq assignVolumeChap volumeName=TheVolume targetSecret=ItsASecret
```

assignVolumeToServer

This command assigns a volume to a server (use for either iSCSI or FibreChannel).

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq assignVolumeToServer volumeName= serverName= login= userName= passWord=
```

| | | |
|---------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>volumeName</i> | Required | The name of the volume |
| <i>serverName</i> | Required | The name of the server |
| <i>accessRights</i> | Optional | The access rights to the volume: r - read-only, x - no access, rw - read-write (default) |
| <i>transport</i> | Optional | Set communication path to iSCSI or FibreChannel. This can be one of: "iSCSI" or "FC", lower case accepted. |
| <i>lun</i> | Optional | Set LUN for FibreChannel attached volume. This can be a value 1-255. (Note: LUN 255 not supported by Microsoft Windows) |

Example

```
cliq assignVolumeToServer volumeName=TheVolume serverName=TheServer  
login=10.0.1.2 userName=admin passWord=secret  
  
cliq assignVolumeToServer volumeName=TheVolume serverName=TheServer
```

cacheCredentials

This command encrypts, caches and associates the username/password with the management group name in the registry. Thereafter, the management group name can be used instead of the username/password for CLI command credentials.

Availability: Windows

Version: 8.0

Request Syntax

```
cliq cacheCredentials groupName= userName= passWord=
```


| | | |
|------------------|----------|--|
| <i>userName</i> | Required | The authentication user name for the storage system. |
| <i>passWord</i> | Required | The password for the storage system. |
| <i>groupName</i> | Required | The name of the management group |

Example

```
cliq cacheCredentials groupName=TheGroup userName=admin
passWord=secret
```

cancelRemoteSnapshot

This command cancels a remote snapshot.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq cancelRemoteSnapshot snapshotName= login= userName= passWord=
```

| | | |
|---------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>snapshotName</i> | Required | The name of the remote snapshot |

Example

```
cliq cancelRemoteSnapshot snapshotName=TheSnapshot login=10.0.1.2
userName=admin passWord=secret

cliq cancelRemoteSnapshot snapshotName=TheSnapshot
```

clearAlertsPolicy

This command clears the Alerts and Events Policy information

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq clearAlertsPolicy login= userName= passWord=
```

| | | |
|-----------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |

| | | |
|------------------|-------------|--|
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
|------------------|-------------|--|

Example

```
cliq clearAlertsPolicy login=10.0.1.3 userName=admin passWord=secret
cliq clearAlertsPolicy
```

clearCredentials

This command removes the association between a username/password pair and a management group name from the registry cached credentials.

Availability: Windows

Version: 8.0

Request Syntax

```
cliq clearCredentials groupName=
```

| | | |
|------------------|----------|----------------------------------|
| <i>groupName</i> | Required | The name of the management group |
|------------------|----------|----------------------------------|

Example

```
cliq clearCredentials groupName=TheGroup
```

clearADInfo

This command removes the active directory configuration from the management group.

Availability: Windows, SSH

Version: 10.0

Request Syntax

```
cliq clearADInfo login= userName= passWord=
```

| | | |
|------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |

Example

```
cliq clearADInfo login=10.0.1.3 userName=admin passWord=secret
cliq clearADInfo
```


clearDnsInfo

This command clears the DNS settings.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq clearDnsInfo login= userName= passWord=
```

| | | |
|------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters userName/passWord or groupName must be specified). |

Example

```
cliq clearDnsInfo login=10.0.1.3 userName=admin passWord=secret
cliq clearDnsInfo
```

clearEmailServerInfo

This command clears the email server settings.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq clearEmailServerInfo login= userName= passWord=
```

| | | |
|------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters userName/passWord or groupName must be specified). |

Example

```
cliq clearEmailServerInfo login=10.0.1.3 userName=admin
passWord=secret
cliq clearEmailServerInfo
```


clearSnmpNotifyPolicy

This command clears the SNMP Notification Policy settings.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq clearSnmpNotifyPolicy login= userName= passWord=
```

| | | |
|------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters userName/passWord or groupName must be specified). |

Example

```
cliq clearSnmpNotifyPolicy login=10.0.1.3 userName=admin  
passWord=secret  
  
cliq clearSnmpNotifyPolicy
```

clearSnmpServiceInfo

This command clears the SNMP Server Info.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq clearSnmpServiceInfo login= userName= passWord=
```

| | | |
|------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters userName/passWord or groupName must be specified). |

Example

```
cliq clearSnmpServiceInfo login=10.0.1.3 userName=admin  
passWord=secret  
  
cliq clearSnmpServiceInfo
```


clearVssVolumeFlags

This command resets snapshot flags in the vss volume. This command is only supported for Windows Server 2008 and higher.

Availability: Windows

Version: 8.5

Request Syntax

```
cliq clearVssVolumeFlags volumeName=  
  
volumeName    Required    The name of the volume
```

Example

```
cliq clearVssVolumeFlags volumeName=x:
```

cloneSnapshot

This command creates one or more SmartClone volumes from a LeftHand OS snapshot. These SmartClone volumes have all the functionality of normal volumes.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq cloneSnapshot snapshotName= volumeName= login= userName= passWord=  
  
login    Required    The IP addresses or DNS-resolvable names of one or more storage  
                        systems  
userName Conditional  The authentication user name for the storage system. (Parameters  
                        userName/passWord or groupName must be specified).  
passWord Conditional  The password for the storage system. (Parameters userName/passWord  
                        or groupName must be specified).  
groupName Conditional  The name of the management group with cached credentials.  
                        (Parameters userName/passWord or groupName must be specified).  
snapshotName Required  The name of the remote snapshot  
volumeName Required    The name of the volume  
description Optional    Optional description
```

Example

```
cliq cloneSnapshot snapshotName=Snapshot1  
volumeName=MyClone1;MyClone2 login=10.0.1.2 userName=admin  
passWord=secret  
  
cliq cloneSnapshot snapshotName=Snapshot1  
volumeName=MyClone1;MyClone2
```


configureRaid

This command reconfigures the RAID setting on a storage system.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq configureRaid configuration= login= userName= passWord=
```

| | | |
|----------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>configuration</i> | Required | The RAID type to set. The possible RAID levels are reported with the <code>cliq getNsmlInfo</code> command. |

Example

```
cliq configureRaid configuration="RAID 10" login=10.0.1.2
userName=admin passWord=secret
cliq configureRaid configuration="RAID 10"
```

connectVolume

This command connects an already present array volume to an application server host.

Availability: Windows

Version: 8.0

Request Syntax

```
cliq connectVolume volumeName= login= userName= passWord=
```

| | | |
|----------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>volumeName</i> | Required | The name of the volume |
| <i>initiatorport</i> | Optional | The initiator port number. |
| <i>persistent</i> | Optional | Automatically restore iSCSI connection when the computer starts up. |

Example

```
cliq connectVolume volumeName=MyVolume login=10.1.2.3 userName=admin  
passWord=secret
```

convertSnapshotTempSpace

This command converts snapshot temporary space to a volume.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq convertSnapshotTempSpace snapshotName= volumeName= login= userName= passWord=
```

| | | |
|---------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters userName/passWord or groupName must be specified). |
| <i>volumeName</i> | Required | The name of the volume |
| <i>snapshotName</i> | Required | The name of the remote snapshot |

Example

```
cliq convertSnapshotTempSpace snapshotName=MySnapshot  
volumeName=NewVolume login=10.1.2.3 userName=admin passWord=secret  
  
cliq convertSnapshotTempSpace snapshotName=MySnapshot  
volumeName=NewVolume
```

createAdminGroup

This command creates an administrative group.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq createAdminGroup login= userName= passWord= description= adminGroupName=  
adminUserName= permissions=
```

| | | |
|-----------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters userName/passWord or groupName must be specified). |

| | | |
|-----------------------|-------------|---|
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>adminGroupName</i> | Required | The administrative group name |
| <i>description</i> | Optional | Optional description |
| <i>adminUserName</i> | Optional | Specifies the users that this group comprises. |
| <i>permissions</i> | Optional | Permissions for the group. This is a character sequence specifying the allowable permissions in the following order: Group,Network,Storage System,Report. The Password permissions are subsumed by the Group permissions.For each group, the allowable permissions are: r - read-only, w - read-write (Report does not support this), f - full-access (Report does not support this)For example:Note: if this is not specified, the permissions are set to rrrr |
| <i>adGroup</i> | Optional | The name of the associated active directory group. |

Example

```
cliq createAdminGroup login=10.0.1.3 userName=admin passWord=secret
description="My shiny new group" adminGroupName=PowerUsers
adminUserName=user1;user2 permissions=ffffr
```

```
cliq createAdminGroup description="My shiny new group"
adminGroupName=PowerUsers adminUserName=user1;user2
permissions=ffffr
```

createAdminUser

This command creates an administrative user.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq createAdminUser login= userName= passWord= description= adminUserName=
adminPassWord= adminGroupName=
```

| | | |
|-----------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>adminUserName</i> | Required | Specifies the users that this group comprises. |
| <i>adminPassWord</i> | Required | The password for the administrative user |
| <i>description</i> | Optional | Optional description |
| <i>adminGroupName</i> | Required | The administrative group name |

Example

```
cliq createAdminUser login=10.0.1.3 userName=admin passWord=secret
description="My shiny new user" adminUserName=user
adminPassWord=secret adminGroupName="Full Administrator"

cliq createAdminUser description="My shiny new user"
adminUserName=user adminPassWord=secret adminGroupName="Full
Administrator"
```

createCluster

This command creates a cluster in a management group.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq createCluster login= userName= passWord= clusterName= description= useVip=
node= vip=
```

| | | |
|--------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>clusterName</i> | Required | The name of the cluster |
| <i>node</i> | Required | The delimited list of node names or IP addresses, or DNS-resolvable node names of the storage systems the cluster comprises. |
| <i>description</i> | Optional | Optional description |
| <i>useVip</i> | Optional | Should virtual IP (VIP) addressing be used? This can be one of: 0, 1 - default |
| <i>vip</i> | Optional | A delimited list of virtual IP address or DNS-resolvable name and subnet mask. Note: since each VIP contains two parameters, IP address and subnet mask, both must be specified in order, even if empty. If multiple vips are entered, they must be on different subnets. |

Example

```
cliq createCluster login=10.0.1.3 userName=admin
passWord=secret clusterName=TheCluster description="My
shiny new cluster" useVip=1 node=10.1.2.4
vip=10.1.2.99;255.255.0.0;150.215.017.009;255.255.240.0

cliq createCluster clusterName=TheCluster description="My
shiny new cluster" useVip=1 node=10.1.2.4
vip=10.1.2.99;255.255.0.0;150.215.017.009;255.255.240.0
```


createEmailNotifyPolicy

This command configures which level of events from the management group are sent via email to the designated recipients.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq createEmailNotifyPolicy login= userName= passWord= email= verbosity=
```

| | | |
|------------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>email</i> | Required | The email address of the recipient. |
| <i>verbosity</i> | Optional | The level of returned information via email notification. 1 - brief, 2 - standard, 3 - verbose |
| <i>alertOnInfo</i> | Conditional | Values are: 0 = email will not be sent on informational events and, 1 = email will be sent for informational events. The default is 0 for <code>createEmailNotifyPolicy</code> . (A combination of parameters <i>alertOnInfo</i> or <i>alertOnWarning</i> or <i>alertOnCritical</i> must be specified). |
| <i>alertOnWarning</i> | Conditional | Values are: 0 = email will not be sent on warning events and, 1 = email will be sent for warning events. The default is 0 for <code>createEmailNotifyPolicy</code> . (A combination of parameters <i>alertOnInfo</i> or <i>alertOnWarning</i> or <i>alertOnCritical</i> must be specified). |
| <i>alertOnCritical</i> | Conditional | Values are: 0 = email will not be sent on critical events and, 1 = email will be sent for critical events. The default is 0 for <code>createEmailNotifyPolicy</code> . (A combination of parameters <i>alertOnInfo</i> or <i>alertOnWarning</i> or <i>alertOnCritical</i> must be specified). |
| <i>emailLocale</i> | Optional | English (default), Chinese, Japanese, Korean |

Example

```
cliq createEmailNotifyPolicy login=10.0.1.3 userName=admin  
passWord=secret email=myemail@myhost.com alertOnWarning=1  
  
cliq createEmailNotifyPolicy email=myemail@myhost.com  
alertOnWarning=1
```

createGroup

This command creates a new management group. This command may take several minutes to complete.

Availability: Windows, SSH

Version: 8.0

Request Syntax


```
cliq createGroup groupName= node= userName= passWord=
```

| | | |
|------------------|----------|--|
| <i>node</i> | Required | The delimited list of node names or IP addresses, or DNS-resolvable node names of the storage systems the cluster comprises. |
| <i>groupName</i> | Required | The name of the management group |
| <i>userName</i> | Required | The authentication user name for the storage system. |
| <i>passWord</i> | Required | The password for the storage system. |

Example

```
cliq createGroup groupName=TheGroup node=10.1.2.3;10.1.2.4  
userName=admin passWord=secret
```

```
cliq createGroup groupName="MG2" node=10.1.2.3;10.1.2.4  
userName=admin passWord=secret
```

createRemoteAssociation

This command creates a remote group-to-primary group association. This association is done automatically when a remote snapshot is created, so this command is not usually needed.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq createRemoteAssociation login= userName= passWord= remote= remoteUserName=  
remotePassWord= primaryBandwidth= remoteBandwidth=
```

| | | |
|-------------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>remote</i> | Required | The IP address or DNS-resolvable names of one or more remote storage system |
| <i>remoteUserName</i> | Optional | The authentication user name for the remote group |
| <i>remotePassWord</i> | Optional | The password for the remote group |
| <i>primaryBandwidth</i> | Optional | The bandwidth used in a copy from the primary group to the remote group. Kb = Kilobits/sec (1000 Bits/second), Mb = Megabits/sec (1000 Kilobits/second), Gb = Gigabits/sec (1000 Megabits/second) |
| <i>remoteBandwidth</i> | Optional | The bandwidth used in a copy from the remote group to the primary group. Kb = Kilobits/sec (1000 Bits/second), Mb = Megabits/sec (1000 Kilobits/second), Gb = Gigabits/sec (1000 Megabits/second) |
| <i>remotegroupname</i> | Optional | The name of the remote management group. |

Example

```
cliq createRemoteAssociation login=10.0.1.2 userName=admin
passWord=secret remote=10.0.1.3 remoteUserName=admin
remotePassWord=secret primaryBandwidth=10Mb remoteBandwidth=10Mb

cliq createRemoteAssociation remote=10.0.1.3 remoteUserName=admin
remotePassWord=secret primaryBandwidth=10Mb remoteBandwidth=10Mb
```

createRemoteSnapshot

This command creates a remote snapshot of a LeftHand OS volume.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq createRemoteSnapshot login= userName= passWord= primarySnapshot=
remoteSnapshot= remoteVolume= description= remote= remoteUserName= remotePassWord=
remoteCluster=
```

| | | |
|-------------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>remote</i> | Required | The IP address or DNS-resolvable names of one or more remote storage system |
| <i>remoteUserName</i> | Optional | The authentication user name for the remote group |
| <i>remotePassWord</i> | Optional | The password for the remote group |
| <i>remotegroupname</i> | Optional | The name of the remote management group to identify cached credentials (from Authentication Console) to use instead of <i>remoteUserName/remotePassWord</i> parameters. |
| <i>primarySnapshot</i> | Required | The name of the local snapshot to remote copy |
| <i>remoteCluster</i> | Required | The name of the remote cluster to host the remote volume |
| <i>remoteVolume</i> | Required | The name of the remote volume to host the snapshot |
| <i>remoteSnapshot</i> | Required | The name of the remote snapshot to create |
| <i>description</i> | Optional | Optional description |
| <i>primaryBandwidth</i> | Optional | The bandwidth used in a copy from the primary group to the remote group. Kb = Kilobits/sec (1000 Bits/second), Mb = Megabits/sec (1000 Kilobits/second), Gb = Gigabits/sec (1000 Megabits/second) |
| <i>remoteBandwidth</i> | Optional | The bandwidth used in a copy from the remote group to the primary group. Kb = Kilobits/sec (1000 Bits/second), Mb = Megabits/sec (1000 Kilobits/second), Gb = Gigabits/sec (1000 Megabits/second) |

Example

```
cliq createRemoteSnapshot login=10.1.2.3 userName=admin
passWord=secret primarySnapshot=Snapshot0
                           remoteSnapshot=Snapshot0
remoteVolume=Volume0 description="Exchange DB-1" remote=10.1.2.4
```



```

remoteCluster="10.0.1.21" remoteUserName=admin remotePassWord=secret
cliq createRemoteSnapshot primarySnapshot=Snapshot0
remoteSnapshot=Snapshot0 remoteVolume=Volume0
description="Exchange DB-1"
remote=10.1.2.4 remoteUserName=admin remotePassWord=secret
remoteCluster="10.0.1.21"

```

createServer

This command creates a representation of a client server in a management group. This "server" can be associated with iSCSI or FibreChannel initiators and be granted access to volumes.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq createServer serverName= useCHAP= initiator= login= userName= passWord=
```

| | | |
|--------------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>serverName</i> | Required | The name of the server |
| <i>description</i> | Optional | Optional description |
| <i>allowiSCSIAccess</i> | Optional | Allow iSCSI access for this host. This can be one of: 0 = disable or 1 = enable. If volumes are attached to a client server via iSCSI and a value of 0 is entered, the client server will lose its ability to communicate with the attached volumes. If an IQN is entered and FibreChannel is NOT configured, the default will be 1, otherwise no default will be selected. |
| <i>vipLoadBalance</i> | Optional | Use VIP load balancing for this host. This can be one of: 0 = disabled or 1 = enabled, 1 is the default. |
| <i>useCHAP</i> | Optional | Use CHAP Authentication this host. This can be one of: 0 = disabled or 1 = enabled. |
| <i>initiator</i> | Optional | A semicolon delimited string of host IQN's. Valid characters are any letter, number, international character or '-', '.' and ':' characters. |
| <i>targetSecret</i> | Optional | The CHAP target secret for the volume. |
| <i>chapName</i> | Optional | The CHAP name for the volume. If this is not specified, the IQN of the local server is used (this parameter is required if run on a storage system). |
| <i>initiatorSecret</i> | Optional | The CHAP initiator secret for the volume. |
| <i>controllingserver</i> | Optional | Enter the IP address of the client server that has Application Aware Snapshot Manager (AASM) installed on it. It will coordinate the snapshot with the applications using SAN volumes. This is required for managed snapshots of FibreChannel connected volumes. This is also required for VMware managed snapshots, enter the Virtual Center Server IP address. |
| <i>allowfcaccess</i> | Optional | Allow FibreChannel ports to be assigned to the client. This can be one of: 0 = disable or 1 = enable. If volumes are attached to a client server |

| | | |
|-----------------------|----------|--|
| | | via FibreChannel and a value of 0 is entered, the client will lose its ability to communicate with the attached volumes. |
| <i>wwpn</i> | Optional | A semicolon delimited list of the unique World Wide Port Name for one or more FibreChannel ports. Expected WWPN formatting is 16 Hex characters with or without the ':' character as a delimiter. For example: 20:21:00:0E:B3:01:AB:C6 or 2021000EB301ABC6. Lower case hex characters a-f are also accepted. |
| <i>bootvolumelun</i> | Optional | The LUN (1-255) of the boot volume. Valid only for a FibreChannel attached volume. (Note: LUN 255 not supported by Microsoft Windows) |
| <i>bootvolumename</i> | Optional | The volume name of the boot volume. Valid only for a FibreChannel attached volume. |

Example

```
cliq createServer serverName=TheServer useCHAP=0
initiator=iqn.1991-05.com.microsoft:w-gregorio.corp.mynetworks.com
login=10.0.1.2 userName=admin passWord=secret

cliq createServer serverName=TheServer useCHAP=0
initiator=iqn.1991-05.com.microsoft:w-gregorio.corp.myworks.com
```

createSite

This command creates a site in a multi-site SAN.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq createSite siteName= login= userName= passWord=
```

| | | |
|--------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters userName/passWord or groupName must be specified). |
| <i>siteName</i> | Required | The name of the site |
| <i>description</i> | Optional | Optional description |
| <i>primary</i> | Optional | This site is the primary site. This can be one of: 0 = disabled or 1 = enabled, 1 is the default |
| <i>node</i> | Optional | The delimited list of node names or IP addresses, or DNS-resolvable node names of the storage systems the cluster comprises. |

Example

```
cliq createSite siteName=Headquarters login=10.0.1.2 userName=admin
passWord=secret

cliq createSite siteName=Headquarters
```


createSnapshot

This command creates a snapshot of one or more LeftHand OS volumes.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq createSnapshot volumeName= snapshotName= login= userName= passWord=
```

| | | |
|----------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters userName/passWord or groupName must be specified). |
| <i>volumeName</i> | Required | The name of the volume |
| <i>snapshotName</i> | Required | The name of the remote snapshot |
| <i>description</i> | Optional | Optional description |
| <i>inheritAccess</i> | Optional | 0 - the snapshot will not inherit the volume list, authentication group, ACL relationships of the original volume (default) 1 - the snapshot will inherit the volume list, authentication group, ACL relationships of the original volume |
| <i>managed</i> | Optional | 0 - the snapshot(s) will not attempt to use VSS on the host connected to the volume (default) 1 - the snapshot(s) will attempt to use VSS on the host connected to the volume |
| <i>wait</i> | Optional | Whether to wait for application managed snapshot process to complete or not . This can be one of: 0 - don't wait, 1 - wait for it to complete (default) |

Example

```
cliq createSnapshot volumeName=volume0;volume1
snapshotName=snapshot0;snapshot1 login=10.0.1.2 userName=admin
passWord=secret

cliq createSnapshot volumeName=volume0;volume1
snapshotName=snapshot0;snapshot1
```

createSnapshotSchedule

This command creates a local or remote snapshot schedule.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq createSnapshotSchedule scheduleName= description= starttime= recurperiod=
volumeName= remoteVolume= retentioncount= login= userName= passWord=
```


| | | |
|-------------------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>volumeName</i> | Required | The name of the volume |
| <i>scheduleName</i> | Required | The name of the schedule |
| <i>recurperiod</i> | Required | The recurrence frequency of the snapshots, specified in seconds. Period may be 0 to indicate the schedule never occurs, otherwise Period must be at least 1800 seconds (30 minutes). |
| <i>starttime</i> | Required | The start time of the schedule. Specified as ISO 8601. Format is YYYY-MM-DDTHH:MM:SSZ. YYYY represents the year, MM is the month, DD is the day of the month, HH is the hour in 24 hour format, MM is the minute, SS is the seconds. The time must always be expressed in GMT time. |
| <i>description</i> | Optional | Optional description |
| <i>retentioncount</i> | Optional | The number of snapshots to maintain. Must be between 1 and 50. Either <i>retentioncount</i> or <i>retentionseconds</i> must be specified. |
| <i>retentionseconds</i> | Optional | How long snapshots should be retained. Either <i>retentioncount</i> or <i>retentionseconds</i> must be specified. |
| <i>remoteip</i> | Optional | The IP address of the remote group. |
| <i>remoteUserName</i> | Optional | The authentication user name for the remote group |
| <i>remotePassWord</i> | Optional | The password for the remote group |
| <i>remoteCluster</i> | Optional | The name of the remote cluster to host the remote volume |
| <i>remoteVolume</i> | Optional | The name of the remote volume to host the snapshot |
| <i>remoteretentioncount</i> | Optional | The number of remote snapshots to maintain. Must be between 1 and 50. Either <i>remoteretentioncount</i> or <i>remoteretentionseconds</i> must be specified. |
| <i>remoteretentionseconds</i> | Optional | How long remote snapshots should be retained. Either <i>remoteretentioncount</i> or <i>remoteretentionseconds</i> must be specified. |
| <i>managed</i> | Optional | 0 - the snapshot(s) will not attempt to use VSS on the host connected to the volume (default) 1 - the snapshot(s) will attempt to use VSS on the host connected to the volume |
| <i>remotegroupname</i> | Optional | The name of the remote management group. |

Example

```
cliq createSnapshotSchedule scheduleName="schedule0"
description="First snapshot schedule"
starttime="2007-06-15T01:01:00Z" recurperiod="3600"
volumeName="volume0" remoteVolume="volume0" retentioncount=5
login="10.0.1.3" userName="admin" passWord="secret"

cliq createSnapshotSchedule scheduleName="schedule0"
description="First snapshot schedule"
starttime="2007-06-15T01:01:00Z" recurperiod="3600"
volumeName="volume0" remoteVolume="volume0" retentioncount=5"
```


createSnmpCommunityString

This command creates an SNMP Community String. The Community String must be the same for all. If no item exists, the Community String is used, otherwise it is ignored and the Community String of existing items is used. Either specify IPAddress (ip address or hostname) or an IP mask and IP Subnet.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq createSnmpCommunityString login= userName= passWord= ipAddress=
communityString=
```

| | | |
|------------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters userName/passWord or groupName must be specified). |
| <i>communityString</i> | Optional | The SNMP community string. |
| <i>ipAddress</i> | Optional | This is the IP address or Host Name to be configured. |
| <i>ipMask</i> | Optional | An IP address mask for SNMP notification. |
| <i>ipSubnet</i> | Optional | An IP Address subnet for SNMP notification. |

Example

```
cliq createSnmpCommunityString login=10.0.1.3 userName=admin
passWord=secret ipAddress=10.0.10.25 communityString=NewString

cliq createSnmpCommunityString ipAddress=10.0.10.25
communityString=NewString
```

createSnmpTrapTarget

This command creates an SNMP Trap Target. The Community String must be the same for all Trap Targets. If no Trap Targets exists, the Community String is used, otherwise it is ignored and the Community String of existing Trap Targets is used.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq createSnmpTrapTarget login= userName= passWord= ipAddress= version=
communityString=
```

| | | |
|-----------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters userName/passWord or groupName must be specified). |

| | | |
|------------------------|-------------|---|
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>ipAddress</i> | Required | This is the IP address or Host Name to be configured. |
| <i>version</i> | Required | The SNMP Version. 1 - Version 1, 2 - Version 2 |
| <i>communityString</i> | Required | The SNMP community string. |

Example

```
cliq createSnmpTrapTarget login=10.0.1.3 userName=admin
passWord=secret ipAddress=10.0.10.25 version=1
communityString=TrapString

cliq createSnmpTrapTarget ipAddress=10.0.10.25 version=1
communityString=TrapString
```

createSyslogNotifyPolicy

This command creates a Syslog Notification Policy.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq createSyslogNotifyPolicy login= userName= passWord= ipAddress=
alertOnCritical=
```

| | | |
|------------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>ipAddress</i> | Required | This is the IP address or Host Name to be configured. |
| <i>alertOnInfo</i> | Conditional | Values are: 0 = the log does not includes informational events and, 1 = the log includes informational events. The default is 0 for createSyslogNotifyPolicy. (A combination of parameters <i>alertOnInfo</i> or <i>alertOnWarning</i> or <i>alertOnCritical</i> must be specified). |
| <i>alertOnWarning</i> | Conditional | Values are: 0 = the log does not includes warning events and, 1 = the log includes warning events. The default is 0 for createSyslogNotifyPolicy. (A combination of parameters <i>alertOnInfo</i> or <i>alertOnWarning</i> or <i>alertOnCritical</i> must be specified). |
| <i>alertOnCritical</i> | Conditional | Values are: 0 = the log does not includes critical events and, 1 = the log includes critical events. The default is 0 for createSyslogNotifyPolicy. (A combination of parameters <i>alertOnInfo</i> or <i>alertOnWarning</i> or <i>alertOnCritical</i> must be specified). |

Example

```
cliq createSyslogNotifyPolicy login=10.0.1.3 userName=admin
passWord=secret ipAddress="10.0.10.25" alertOnCritical="1"
alertOnWarning=1

cliq createSyslogNotifyPolicy ipAddress="10.0.10.25"
alertOnCritical="1" alertOnWarning=1
```

createVolume

This command creates a SAN volume without connecting to a host.

Availability: Windows, SSH

Version: 8.0

Warnings

- Using a stridePages value other than the default may impact volume IO performance.
- Using an initialQuota value other than the default may impact volume IO performance.
- Enabling checksums may impact volume IO performance.

Request Syntax

```
cliq createVolume volumeName= clusterName= size= description= login= userName=
passWord=
```

| | | |
|----------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>volumeName</i> | Required | The name of the volume |
| <i>clusterName</i> | Required | The name of the cluster |
| <i>size</i> | Required | The size of the volume, with units specified: <n>MB - n Megabytes (1024 Kilobytes), <n>GB - n Gigabytes (1024 Megabytes), <n>TB - n Terabytes (1024 Gigabytes) |
| <i>description</i> | Optional | Optional description |
| <i>replication</i> | Optional | The replication level for the volume (1 2 3 4) |
| <i>parity</i> | Optional | The number of parity storage systems for the data on this volume. This enables parity network RAID on the volume. Replication and parity are supported in the following combinations: replication:1, parity:0 Network RAID-0 (None), replication:2, parity:0 Network RAID-10 (2-way Mirror), replication:3, parity:0 Network RAID-10+1 (3-way Mirror), replication:4, parity:0 Network RAID-10+2 (4-way Mirror), replication:2, parity:1 Network RAID-5 (Single parity), replication:3, parity:2 Network RAID-6 (Dual Parity) |
| <i>checkSum</i> | Optional | 0 - the volume does not use checksums1 - the volume uses checksums |
| <i>thinProvision</i> | Optional | 0 = the volume does not use thin-provisioning, 1 = The volume is thin-provisioned (in a thinly provisioned volume, reserve may be < length) |

Example

```
cliq createVolume volumeName=MyVolume clusterName=TheCluster
size=100GB description="Exchange DB-1" login=10.0.1.2;10.0.1.3
userName=admin passWord=secret

cliq createVolume volumeName=MyVolume clusterName=TheCluster
size=100GB description="Exchange DB-1"
```

deleteAdminGroup

This command deletes an administrative group.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq deleteAdminGroup login= userName= passWord= adminGroupName=
```

| | | |
|-----------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>adminGroupName</i> | Required | The administrative group name |

Example

```
cliq deleteAdminGroup login=10.0.1.3 userName=admin passWord=secret
adminGroupName=PowerUsers

cliq deleteAdminGroup adminGroupName=PowerUsers
```

deleteAdminUser

This command deletes an administrative user. The last administrator user id of the default administrative group cannot be removed.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq deleteAdminUser login= userName= passWord= adminUserName=
```

| | | |
|-----------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |

| | | |
|----------------------|-------------|---|
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>adminUserName</i> | Required | Specifies the users that this group comprises. |

Example

```
cliq deleteAdminUser login=10.0.1.3 userName=admin passWord=secret
adminUserName=user

cliq deleteAdminUser adminUserName=user
```

deleteAutoMountPolicy

This command deletes the auto-mount policy for the HP StoreVirtual Recovery Manager application on this computer.

Availability: Windows

Version: 10.0

Request Syntax

```
cliq deleteAutoMountPolicy groupName= volumeName=
```

| | | |
|-------------------|----------|----------------------------------|
| <i>groupName</i> | Optional | The name of the management group |
| <i>volumeName</i> | Optional | The name of the volume |

Example

```
cliq deleteAutoMountPolicy groupName="MG2" volumeName="Voll"

cliq deleteAutoMountPolicy
```

deleteCluster

This command deletes a cluster. All storage systems are removed.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq deleteCluster clusterName= login= userName= passWord=
```

| | | |
|--------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>clusterName</i> | Required | The name of the cluster |

Example

```
cliq deleteCluster clusterName=TheCluster login=10.1.2.3
userName=admin passWord=secret

cliq deleteCluster clusterName=TheCluster
```

deleteEmailNotifyPolicy

This command deletes an Email Notification Policy. The designated recipient will no longer receive emails from management group alerts.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq deleteEmailNotifyPolicy email= login= userName= passWord=
```

| | | |
|------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>email</i> | Required | The email address of the recipient. |

Example

```
cliq deleteEmailNotifyPolicy email=myemail@myhost.com login=10.1.2.3
userName=admin passWord=secret

cliq deleteEmailNotifyPolicy email=myemail@myhost.com
```

deleteGroup

This command deletes a management group. All storage systems are removed.

Availability: Windows, SSH

Version: 8.0

Warnings

This operation is irreversible.

Request Syntax

```
cliq deleteGroup groupName= login= userName= passWord=
```

| | | |
|-----------------|----------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Required | The authentication user name for the storage system. |
| <i>passWord</i> | Required | The password for the storage system. |

groupName Required The name of the management group

Example

```
cliq deleteGroup login=10.1.2.3 userName=admin passWord=secret  
groupName="MG2"
```

```
cliq deleteGroup groupName="MG2"
```

deleteRemoteAssociation

This command deletes a remote group to primary group association.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq deleteRemoteAssociation login= userName= passWord= remote= remoteUserName=  
remotePassWord=
```

| | | |
|------------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>remote</i> | Required | The IP address or DNS-resolvable names of one or more remote storage system |
| <i>remoteUserName</i> | Optional | The authentication user name for the remote group |
| <i>remotePassWord</i> | Optional | The password for the remote group |
| <i>remotegroupname</i> | Optional | The name of the remote management group. |

Example

```
cliq deleteRemoteAssociation login=10.0.1.2 userName=admin  
passWord=secret remote=10.0.1.3 remoteUserName=admin  
remotePassWord=secret
```

```
cliq deleteRemoteAssociation remote=10.0.1.3 remoteUserName=admin  
remotePassWord=secret
```

deleteServer

This command deletes a Server.

Availability: Windows, SSH

Version: 9.0

Warnings

This operation is irreversible.

Request Syntax

```
cliq deleteServer serverName= login= userName= passWord=
```

| | | |
|-------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>serverName</i> | Required | The name of the server |

Example

```
cliq deleteServer serverName=MyServer login=10.1.2.3 userName=admin  
passWord=secret  
cliq deleteServer serverName=MyServer
```

deleteSite

This command deletes a site in a multi-site SAN.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq deleteSite siteName= login= userName= passWord=
```

| | | |
|------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>siteName</i> | Required | The name of the site |

Example

```
cliq deleteSite siteName=Headquarters login=10.1.2.3 userName=admin  
passWord=secret  
cliq deleteSite siteName=Headquarters
```

deleteSnapshot

This command deletes a snapshot.

Availability: Windows, SSH

Version: 8.0

Warnings

This operation is irreversible.

Request Syntax

```
cliq deleteSnapshot snapshotName= login= userName= passWord=
```

| | | |
|---------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>snapshotName</i> | Required | The name of the remote snapshot |

Example

```
cliq deleteSnapshot snapshotName=Snapshot0 login=10.1.2.3  
userName=admin passWord=secret  
cliq deleteSnapshot snapshotName=Snapshot0
```

deleteSnapshotSchedule

This command deletes a previously created snapshot schedule.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq deleteSnapshotSchedule scheduleName= login= userName= passWord=
```

| | | |
|---------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>scheduleName</i> | Required | The name of the schedule |

Example

```
cliq deleteSnapshotSchedule scheduleName="Exchange Backup"  
login=10.1.2.3 userName=admin passWord=secret  
cliq deleteSnapshotSchedule scheduleName="Exchange Backup"
```


deleteSnapshotTempSpace

This command deletes the snapshot temporary space.

Availability: Windows, SSH

Version: 8.0

Warnings

This operation is irreversible.

Request Syntax

```
cliq deleteSnapshotTempSpace snapshotName= login= userName= passWord=
```

| | | |
|---------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>snapshotName</i> | Required | The name of the remote snapshot |

Example

cliq deleteSnapshotTempSpace snapshotName=TheSnapshot login=10.1.2.3
userName=admin passWord=secret

cliq deleteSnapshotTempSpace snapshotName=TheSnapshot

deleteSnmpCommunityString

This command deletes an SNMP CommunityString. Either specify an IP Address (as IP Address or Hostname) or IP Mask and IP Subnet.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq deleteSnmpCommunityString ipAddress= login= userName= passWord=
```

| | | |
|------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>ipAddress</i> | Optional | This is the IP address or Host Name to be configured. |
| <i>ipMask</i> | Optional | An IP address mask for SNMP notification. |

ipSubnet Optional An IP Address subnet for SNMP notification.

Example

```
cliq deleteSnmpCommunityString ipAddress=10.0.10.25 login=10.1.2.3  
      userName=admin passWord=secret
```

```
cliq deleteSnmpCommunityString ipAddress=10.0.10.25
```

deleteSnmpTrapTarget

This command deletes an SNMP Trap Target.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq deleteSnmpTrapTarget ipAddress= login= userName= passWord= version=
```

| | | |
|------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters userName/passWord or groupName must be specified). |
| <i>ipAddress</i> | Required | This is the IP address or Host Name to be configured. |
| <i>version</i> | Required | The SNMP Version. 1 - Version 1, 2 - Version 2 |

Example

```
cliq deleteSnmpTrapTarget ipAddress=10.10.10.25 login=10.1.2.3  
      userName=admin passWord=secret version=2
```

```
cliq deleteSnmpTrapTarget ipAddress=10.10.10.25 version=2
```

deleteSyslogNotifyPolicy

This command deletes a Syslog Notification Policy.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq deleteSyslogNotifyPolicy ipAddress= login= userName= passWord=
```

| | | |
|-----------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters userName/passWord or groupName must be specified). |

| | | |
|------------------|-------------|--|
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>ipAddress</i> | Required | This is the IP address or Host Name to be configured. |

Example

```
cliq deleteSyslogNotifyPolicy ipAddress=10.10.10.25 login=10.1.2.3
  userName=admin passWord=secret

cliq deleteSyslogNotifyPolicy ipAddress=10.10.10.25
```

deleteVirtualManager

This command deletes a virtual manager from a group.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq deleteVirtualManager login= userName= passWord=
```

| | | |
|------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |

Example

```
cliq deleteVirtualManager login=10.1.2.3 userName=admin
  passWord=secret

cliq deleteVirtualManager
```

deleteVolume

This command forcibly deletes a SAN volume without disconnecting from the host.

Availability: Windows, SSH

Version: 8.0

Warnings

This operation is irreversible.

Request Syntax

```
cliq deleteVolume volumeName= login= userName= passWord=
```

| | | |
|--------------|----------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
|--------------|----------|---|

| | | |
|-------------------|-------------|---|
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>volumeName</i> | Required | The name of the volume |

Example

```
cliq deleteVolume volumeName=MyVolume login=10.1.2.3 userName=admin
passWord=secret
cliq deleteVolume volumeName=MyVolume
```

disconnectLocalVolume

This command disconnects a SAN volume from the host. This command is only supported for iSCSI.

Availability: Windows

Version: 8.0

Request Syntax

```
cliq disconnectLocalVolume volumeName=
```

| | | |
|-------------------|----------|------------------------|
| <i>volumeName</i> | Required | The name of the volume |
|-------------------|----------|------------------------|

Example

```
cliq disconnectLocalVolume volumeName=z:
```

discoverTcp

This command discovers storage systems and management groups on the network, using TCP.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq discoverTCP groupOrder= node=
```

| | | |
|--------------------|----------|--|
| <i>node</i> | Required | The delimited list of node names or IP addresses, or DNS-resolvable node names of the storage systems the cluster comprises. |
| <i>groupOrder</i> | Optional | Return storage systems ordered by group membership. This can be one of: 0 - default, 1 |
| <i>receivePort</i> | Optional | The TCP port to receive the discovery packets (defaults to an unused port if unspecified) |
| <i>waitForData</i> | Optional | The number of milliseconds to wait for the discovery packets (defaults to 3000 if unspecified) |

Example

```
cliq discoverTCP groupOrder=1 node=10.1.2.3;10.1.2.4
cliq discoverTCP groupOrder=1 node=10.1.2.3;10.1.2.4
```

discoverUdp

This command discovers storage systems and management groups on the network, using UDP.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq discoverUdp ipMask= ipSubnet=
```

| | | |
|--------------------|----------|--|
| <i>ipMask</i> | Required | An IP address mask for SNMP notification. |
| <i>ipSubnet</i> | Required | An IP Address subnet for SNMP notification. |
| <i>groupOrder</i> | Optional | Return storage systems ordered by group membership. This can be one of: 0 - default, 1 |
| <i>receivePort</i> | Optional | The TCP port to receive the discovery packets (defaults to an unused port if unspecified) |
| <i>waitForData</i> | Optional | The number of milliseconds to wait for the discovery packets (defaults to 3000 if unspecified) |

Example

```
cliq discoverUdp ipMask=255.255.240.0 ipSubnet=10.0.0.0
cliq discoverUdp ipMask=255.255.240.0 ipSubnet=10.0.0.0
```

dismountVolume

This command dismounts the volume.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq dismountVolume mountPoint=
```

| | | |
|-------------------|----------|---|
| <i>mountPoint</i> | Required | The drive letter or mount point on the host for the volume (LUN will be uninitialized if not specified) |
|-------------------|----------|---|

Example

```
cliq dismountVolume mountPoint=5
cliq dismountVolume mountPoint=5
```


findADInfo

This command queries the management group for information about the associated AD domain.

Availability: Windows, SSH

Version: 10.0

Request Syntax

```
cliq findADInfo login= userName= password=
```

| | | |
|-------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>hostName</i> | Optional | The name or IP address of an active directory server, when you specify <i>hostname</i> in the query, you get back BASEDN for this server. The name must be specified in the following format: "ldap://10.10.10.10" |
| <i>adUserName</i> | Optional | An active directory user name, when you specify it, you get back list of active directory groups that user belongs to. |
| <i>ldaps</i> | Optional | Use secure ldap connection, set it to false to change, default is true. |

Example

```
CLIQ>findadinfo login=10.01.72.3 username=joeuser password=abcd1234  
hostname=ldap://10.21.66.9
```

```
HP StoreVirtual Command Line Interface, v10.0.0.1  
(C) Copyright 2007-2012 Hewlett-Packard Development Company, L.P.
```

RESPONSE

```
result          0  
processingTime  4044  
name            CliqSuccess  
memoryUsage     838317  
description     Operation succeeded.
```

INFO

```
basedn DC=win8dom,DC=com
```

```
CLIQ>findadinfo login=10.01.72.3 username=joeuser password=abcd1234  
hostname=ldap://10.21.66.91 ldaps=1
```

```
HP StoreVirtual Command Line Interface, v10.0.0.1  
(C) Copyright 2007-2012 Hewlett-Packard Development Company, L.P.
```

RESPONSE

```
result          0  
processingTime  4776
```



```
name      CliqSuccess
memoryUsage 838981
description Operation succeeded.
```

```
INFO
  basedn DC=win8dom,DC=com
```

```
CLIQ>findadinfo login=10.01.72.3 username=joeuser password=abcd1234
adusername=dtest@win8dom.com
```

```
HP StoreVirtual Command Line Interface, v10.0.0.1
(C) Copyright 2007-2012 Hewlett-Packard Development Company, L.P.
```

```
RESPONSE
  result      0
  processingTime 3971
  name      CliqSuccess
  memoryUsage 837947
  description Operation succeeded.
```

```
GROUP
  name group_1-1-1
```

```
GROUP
  name SANFull
```

findFile

Availability: Windows, SSH

Version: 10.0

Request Syntax

```
cliq findFile login= userName= passWord=
```

| | | |
|--------------------|----------|--|
| <i>source</i> | Required | Source filter, source name |
| <i>filter</i> | Optional | The optional search filter. |
| <i>copy</i> | Optional | The optional ability to copy found file(s) and folder(s), default is false. |
| <i>destination</i> | Optional | The optional destination for copied file(s) and folder(s). |
| <i>recurse</i> | Optional | The optional flag for performing the operation recursively, default is true. |

Example

```
cliq findFile source="Vol2" destination="//Temp"
```

getADInfo

This command gets the current active directory configuration of the management group.

Availability: Windows, SSH

Version: 10.0

Request Syntax

```
cliq getADInfo login= userName= passWord=
```

| | | |
|------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |

Response Syntax

```
INFO ...
```

INFO This section contains active directory information.

Example

```
cliq getADInfo login=10.0.1.3 userName=admin passWord=secret
HP StoreVirtual Command Line Interface, v10.
(C) Copyright 2007-2012 Hewlett-Packard Development Company, L.P.

RESPONSE
result          0
processingTime  13556
name            CliqSuccess
memoryUsage     835357
description     Operation succeeded

INFO
userContext
configValid true
bindUser       win8bind@win8dom.com
baseDN         DC=win8dom,DC=com
adServer       ldap://10.21.66.91/
```

getAlertLog

This command returns Alerts.log information.

Availability: Windows

Version: 8.5

Request Syntax

```
cliq getAlertLog login= userName= passWord=
```

| | | |
|--------------|----------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
|--------------|----------|---|

| | | |
|------------------|-------------|---|
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>logFile</i> | Optional | The name of the local file used to store the returned information |

Example

```
cliq getAlertLog login=10.1.2.3 userName=admin passWord=secret
cliq getAlertLog
```

getAutoMountPolicy

This command gets all of the auto-mount policies for the HP StoreVirtual Recovery Manager application on this computer.

Availability: Windows

Version: 10.0

Request Syntax

```
cliq getAutoMountPolicy
```

Example

```
cliq getAutoMountPolicy
cliq getAutoMountPolicy
```

getClusterInfo

This command returns information about a cluster.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq getClusterInfo clusterName= login= userName= passWord=
```

| | | |
|--------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>clusterName</i> | Optional | The name of the cluster |

| | | |
|--------------------|----------|--|
| <i>searchDepth</i> | Optional | Which objects to inspect 1 - Clusters only, 2 - Clusters and volumes, 3 - Clusters, volumes and snapshots, 4 - Clusters, volumes, snapshots and remote snapshots (default). The greater the search depth number, the longer the call can take. |
| <i>verbose</i> | Optional | How much information to return 0 - Get summary information only (better performance), 1 - Get all information (better information - default). The greater the verbose number, the longer the call can take. |

Response Syntax

```
CLUSTER ...
NSM ...
VIP ...
VOLUME ...
```

| | |
|----------------|--|
| <i>CLUSTER</i> | This section cluster contains information. |
| <i>NSM</i> | This section contains NSM information. |
| <i>VIP</i> | This section contains VIP information. |
| <i>VOLUME</i> | This section contains volume information. |

Example

```
cliq getClusterInfo clusterName=Cluster0 login=10.1.2.3
      userName=admin passWord=secret
cliq getClusterInfo clusterName=Cluster0
```

getDnsInfo

This command gets the DNS settings.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq getDnsInfo login= userName= passWord=
```

| | | |
|------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters userName/passWord or groupName must be specified). |

Response Syntax

```
DNSINFO ...
```

| | |
|----------------|--|
| <i>DNSINFO</i> | This section contains DNS information. |
|----------------|--|

Example

```
cliq getDnsInfo login=10.0.1.3 userName=admin passWord=secret  
cliq getDnsInfo
```

getEventLog

This command returns event information.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq getEventLog login= userName= passWord= type= format=
```

| | | |
|------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>type</i> | Optional | Event type. This can be one of: AllAlerts, AllEvents, GlobalAlerts, GlobalEvents, LocalAlerts, LocalEvents |
| <i>format</i> | Optional | Output format. This can be one of: Remote, Client, Xml |
| <i>report</i> | Optional | Output verbosity. This can be one of: Brief, Standard, Verbose |
| <i>time</i> | Optional | Time filter, format YYYYMMDDhhmmss:YYYYMMDDhhmmss |
| <i>component</i> | Optional | Component filter. This can be one or more of: Saniq, Hal, Sys |
| <i>severity</i> | Optional | Severity filter. This can be one or more of: Info, Warning, Critical |
| <i>object</i> | Optional | Object filter. This can be one or more of: MgmtGroup, RemoteMgmtGroup, Cluster, Manager, VirtualManager, Store, SnapshotSchedule, Volume, Snapshot |
| <i>system</i> | Optional | System filter. This can be one or more of: System, Controller, Cache, Disk, Boot, Backplane, Fan, Temperature, Voltage, PowerSupply, RAID |
| <i>source</i> | Optional | Source filter, source name |
| <i>user</i> | Optional | The name of the administrative user |

Example

```
cliq getEventLog login=10.1.2.3 userName=admin passWord=secret  
type=AllEvents format=Xml  
  
component=Saniq severity=warning;Critical object=Cluster  
system=System;Disk
```

getGroupInfo

This command returns information about a management group.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq getGroupInfo login= userName= passWord=
```

| | | |
|--------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>searchDepth</i> | Optional | Which objects to inspect 1 - Groups only, 2 - Groups and clusters, 3 - Groups, clusters and volumes, 4 - Groups, clusters, volumes and snapshots, 5 - Groups, clusters, volumes, snapshots and remote snapshots (default). The greater the search depth number, the longer the call can take. |
| <i>verbose</i> | Optional | How much information to return 0 - Get summary information only (better performance), 1 - Get all information (better information - default). The greater the verbose number, the longer the call can take. |

Response Syntax

```
GROUP ...
ALERTANDEVENTPOLICY ...
EMAILNOTIFYPOLICY ...
EMAILSERVERINFO ...
SNMPSERVICEPOLICY ...
SNMPNOTIFICATIONPOLICY ...
SNMPCOMMUNITYSTRING ...
SNMPTRAPTARGET ...
FIBRECHANNEL ...
DNSINFO ...
NSM ...
CUSTOMERINFO ...
SERVERAPPLICATION ...
CLIENTAPPLICATION ...
REMOTEASSOCIATION ...
ADMINGROUP ...
CLUSTER ...
```

| | |
|-------------------------------|--|
| <i>GROUP</i> | This section contains group information. |
| <i>ALERTANDEVENTPOLICY</i> | This section contains alert and event policy information. |
| <i>EMAILNOTIFYPOLICY</i> | This section contains email notification policy information. |
| <i>EMAILSERVERINFO</i> | This section contains email server information. |
| <i>SNMPSERVICEPOLICY</i> | This section contains SNMP service policy information. |
| <i>SNMPNOTIFICATIONPOLICY</i> | This section contains SNMP notification policy information. |
| <i>SNMPCOMMUNITYSTRING</i> | This section contains SNMP community string information. |
| <i>SNMPTRAPTARGET</i> | This section contains SNMP trap target information. |
| <i>FIBRECHANNEL</i> | This section contains fibre channel information. |
| <i>DNSINFO</i> | This section contains DNS information. |
| <i>NSM</i> | This section contains NSM information. |
| <i>CUSTOMERINFO</i> | This section contains customer information. |
| <i>SERVERAPPLICATION</i> | This section contains server application information. |
| <i>CLIENTAPPLICATION</i> | This section contains client application information. |
| <i>REMOTEASSOCIATION</i> | This section contains remote association information. |
| <i>ADMINGROUP</i> | This section contains admin group information. |
| <i>CLUSTER</i> | This section cluster contains information. |

Example

```
cliq getGroupInfo login=10.1.2.3 userName=admin passWord=secret
cliq getGroupInfo
```

getLocalVolumes

This command returns information about connected volumes hosted by the HP StoreVirtual array.

Availability: Windows

Version: 8.0

Request Syntax

```
cliq getLocalVolumes
```

| | | |
|--------------------|----------|---|
| <i>searchDepth</i> | Optional | Which objects to inspect 1 - Volumes only, 2 - Volumes and snapshots, 3 - Volumes, snapshots and remote snapshots (default). The greater the search depth number, the longer the call can take. |
|--------------------|----------|---|

Example

```
cliq getLocalVolumes
```

getNotificationPolicy

This command returns information about the Alerts and Events Policy, Email Notification Policy, Syslog Notification Policy, and Email Server Setting.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq getNotificationPolicy login= userName= passWord=
```

| | | |
|------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters userName/passWord or groupName must be specified). |

Example

```
cliq getNotificationPolicy login=10.1.2.3 userName=admin
passWord=secret
cliq getNotificationPolicy
```


getNsmInfo

This command returns information about a storage system.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq getNsmInfo login= userName= passWord=
```

| | | |
|-----------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |

Response Syntax

```
NSM ...  
FIBRECHANNEL ...  
NIC ...  
BONDTYPE ...  
GOSSIPADDRESS ...  
RAIDSETTING ...
```

| | |
|----------------------|--|
| <i>NSM</i> | This section contains NSM information. |
| <i>FIBRECHANNEL</i> | This section contains fibre channel information. |
| <i>NIC</i> | This section contains NIC information. |
| <i>BONDTYPE</i> | This section contains supported bond type information. |
| <i>GOSSIPADDRESS</i> | This section contains gossip address information. |
| <i>RAIDSETTING</i> | This section contains supported raid type information. |

Example

```
cliq getNsmInfo login=10.1.2.3 userName=admin passWord=secret  
cliq getNsmInfo
```

getNsmLogs

This command gathers all log files from a storage system and stores the archive locally.

Availability: Windows

Version: 8.0

Request Syntax

```
cliq getNsmLogs login= userName= passWord= logFile=
```

| | | |
|--------------|----------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
|--------------|----------|---|

| | | |
|-----------------|-------------|--|
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>logFile</i> | Required | The name of the local file used to store the returned information |

Example

```
cliq getNsmLogs login=10.1.2.3 userName=admin passWord=secret
logFile=c:\logs.tar.gz
```

getPerformanceStats

This command returns performance monitoring statistics.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq getPerformanceStats login= userName= passWord=
```

| | | |
|------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>interval</i> | Optional | The interval in between counter sampling in milliseconds. Defaults to 6000. Note: Because the internal sampling frequency is 6 seconds, it's not recommended to set this value less than 6000 |

Example

```
cliq getPerformanceStats login=10.1.2.3 userName=admin
passWord=secret
cliq getPerformanceStats
```

getRemoteSnapshotInfo

This command returns information about remote snapshots.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq getRemoteSnapshotInfo snapshotName= login= userName= passWord=
```

| | | |
|--------------|----------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
|--------------|----------|---|

| | | |
|---------------------|-------------|---|
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>snapshotName</i> | Optional | The name of the remote snapshot |
| <i>verbose</i> | Optional | How much information to return 0 - Get summary information only (better performance), 1 - Get all information (better information - default). The greater the verbose number, the longer the call can take. |

Response Syntax

```
REMOTESNAPSHOT ...
```

REMOTESNAPSHOT This section contains remote snapshot information.

Example

```
cliq getRemoteSnapshotInfo snapshotName=TheSnapshot login=10.1.2.3
  userName=admin passWord=secret
cliq getRemoteSnapshotInfo snapshotName=TheSnapshot
```

getScsiInfo

This command returns SCSI inquiry information about a locally connected volume.

Availability: Windows

Version: 8.0

Request Syntax

```
cliq getScsiInfo volumeName=
```

volumeName Required The name of the volume

Example

```
cliq getScsiInfo volumeName=z:
```

getServerCapabilities

This will interrogate a remote server for its HP StoreVirtual integration capabilities. If this call succeeds, the actual capabilities will be returned. The only acceptable result here is VSS Snapshot Integration. For anticipated future releases, this may also include information about virtual machine hosting (Vmware, Citrix, Hyper-V), and Server information.

Availability: Windows, SSH

Version: 8.5

Request Syntax

```
cliq getServerCapabilities serverIp=
```


serverIp Required The Windows server IP address.

Example

```
cliq getServerCapabilities serverIp=10.0.1.2
cliq getServerCapabilities serverIp=10.0.1.2
```

getServerInfo

This will return information about server configurations in the management group, which contain permission settings for real client servers to connect to LeftHand OS volumes.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq getServerInfo login= userName= passWord=
```

| | | |
|--------------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>serverName</i> | Optional | The name of the server |
| <i>serverclustername</i> | Optional | The name of the server cluster. |

Response Syntax

```
SERVER ...
VOLUME ...
```

| | |
|---------------|---|
| <i>SERVER</i> | This section contains server information. |
| <i>VOLUME</i> | This section contains volume information. |

Example

```
cliq getServerInfo login=10.0.1.2 userName=admin passWord=secret
cliq getServerInfo
```

getServerJobInfo

This command will display completed and running application managed snapshot jobs on a Windows Application Server.

Availability: Windows, SSH

Version: 9.5

Request Syntax


```
cliq getServerJobInfo serverIp= jobId=
```

| | | |
|-------------------|----------|--------------------------------|
| <i>serverIp</i> | Required | The Windows server IP address. |
| <i>jobId</i> | Optional | Job ID |
| <i>volumeName</i> | Optional | The name of the volume |

Response Syntax

```
response
description=""
name=""
processingTime=""
result=""

job
applicationIntegration=""
description=""
endTime=""
instanceID=""
percentComplete=""
result=""
startTime=""
status=""
volumeName=""
```

| | |
|-------------------------------|--|
| <i>description</i> | Optional description |
| <i>name</i> | Name of the CLIQ error |
| <i>processingTime</i> | Processing time |
| <i>result</i> | Result code |
| <i>job</i> | The job data |
| <i>applicationIntegration</i> | Managed application type 0-VSS, 1-VMWare |
| <i>endTime</i> | Time when the job is completed |
| <i>instanceID</i> | Instance ID |
| <i>percentComplete</i> | Percent complete |
| <i>volumeName</i> | The name of the volume |

Example Request

```
cliq getServerJobInfo serverIp=1.2.3.4 jobId=1123
```

Example Response

```
response
  description  Operation succeeded.
  name        GaucheSuccess
  processingTime 1443
  result      0

  job
    applicationIntegration 1
    description            Operation succeeded.
    endTime                10:00:00
    instanceID             1234
    percentComplete        100
    result                 0
    startTime              10:10:00
    status                 Completed
    volumeName             volume
```


getServerVolumeInfo

This command returns the features of a volume by interrogating a remote server. This will return VSS associated volumes.

Availability: Windows, SSH

Version: 8.5

Request Syntax

```
cliq getServerVolumeInfo serverIp=
```

| | | |
|--------------------|----------|---|
| <i>serverIp</i> | Required | The Windows server IP address. |
| <i>searchDepth</i> | Optional | Which objects to inspect 1 - Volumes only, 2 - Volumes and snapshots, 3 - Volumes, snapshots and remote snapshots (default). The greater the search depth number, the longer the call can take. |

Response Syntax

VOLUME ...

VOLUME This section contains volume information.

Example

```
cliq getServerVolumeInfo serverIp="10.0.1.45"
cliq getServerVolumeInfo serverIp="10.0.1.45"
```

getSiteInfo

This command returns site information on multi-site SANs.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq getSiteInfo siteName= login= userName= passWord=
```

| | | |
|------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters userName/passWord or groupName must be specified). |
| <i>siteName</i> | Optional | The name of the site |

Response Syntax

SITE ...
NSM ...

| | |
|-------------|---|
| <i>SITE</i> | This section contains site information. |
| <i>NSM</i> | This section contains NSM information. |

Example

```
cliq getSiteInfo siteName=TheSite login=10.1.2.3 userName=admin
passWord=secret

cliq getSiteInfo siteName=TheSite
```

getSnapshotInfo

This command returns information about a snapshot.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq getSnapshotInfo snapshotName= login= userName= passWord=
```

| | | |
|---------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters userName/passWord or groupName must be specified). |
| <i>snapshotName</i> | Optional | The name of the remote snapshot |
| <i>searchDepth</i> | Optional | Which objects to inspect 1 - Snapshots only, 2 - Snapshots and remote snapshots (default). The greater the search depth number, the longer the call can take. |
| <i>verbose</i> | Optional | How much information to return 0 - Get summary information only (better performance), 1 - Get all information (better information - default). The greater the verbose number, the longer the call can take. |

Response Syntax

```
SNAPSHOT ...
STATUS ...
SESSION ...
PERMISSION ...
REMOTESNAPSHOT ...
```

| | |
|-----------------------|--|
| <i>SNAPSHOT</i> | This section contains snapshot information. |
| <i>STATUS</i> | This section contains status information. |
| <i>SESSION</i> | This section contains session information. |
| <i>PERMISSION</i> | This section contains permission information. |
| <i>REMOTESNAPSHOT</i> | This section contains remote snapshot information. |

Example

```
cliq getSnapshotInfo snapshotName=TheSnapshot login=10.1.2.3
  userName=admin passWord=secret

cliq getSnapshotInfo snapshotName=TheSnapshot
```

getSnapshotScheduleInfo

This command returns information about snapshot schedules.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq getSnapshotScheduleInfo login= userName= passWord=
```

| | | |
|---------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>scheduleName</i> | Optional | The name of the schedule |

Response Syntax

```
SCHEDULE ...
```

SCHEDULE This section contains schedule information.

Example

```
cliq getSnapshotScheduleInfo login=10.0.1.3 userName=admin
  passWord=secret

cliq getSnapshotScheduleInfo
```

getSnmpInfo

This command returns information about the SNMP Service and Targets.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq getSnmpInfo login= userName= passWord=
```

| | | |
|--------------|----------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
|--------------|----------|---|

| | | |
|------------------|-------------|---|
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |

Response Syntax

```
SNMPSERVICEPOLICY ...
SNMPNOTIFICATIONPOLICY ...
SNMPCOMMUNITYSTRING ...
SNMPTRAPTARGET ...
```

| | |
|-------------------------------|---|
| <i>SNMPSERVICEPOLICY</i> | This section contains SNMP service policy information. |
| <i>SNMPNOTIFICATIONPOLICY</i> | This section contains SNMP notification policy information. |
| <i>SNMPCOMMUNITYSTRING</i> | This section contains SNMP community string information. |
| <i>SNMPTRAPTARGET</i> | This section contains SNMP trap target information. |

Example

```
cliq getSnmInfo login=10.1.2.3 userName=admin passWord=secret
cliq getSnmInfo
```

getSupportInfo

This command gathers all support log files from a management group and all its member storage systems. If the specified storage system does not belong to any management group, then only logs from the storage system will be collected. This command stores the archive locally.

Availability: Windows

Version: 8.5

Request Syntax

```
cliq getSupportInfo login= userName= passWord= filepath=
```

| | | |
|------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>filepath</i> | Optional | The path to hold the final archive, if not specified, the current directory will be used. |

Response Syntax

```
INFO ...
FCADAPTER ...
```

| | |
|-------------|---|
| <i>INFO</i> | This section contains active directory information. |
|-------------|---|

FCADAPTER This section contains fibre channel adapter information.

Example

```
cliq getSupportInfo login=10.1.2.3 userName=admin passWord=secret  
filepath=c:\temp
```

getSystemInfo

This command returns version information about the API, and other dependent libraries.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq getSystemInfo
```

Response Syntax

```
INFO ...  
FCADAPTER ...
```

INFO This section contains active directory information.
FCADAPTER This section contains fibre channel adapter information.

Example

```
cliq getSystemInfo  
cliq getSystemInfo
```

getVolumeInfo

This command returns information about a volume.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq getVolumeInfo volumeName= login= userName= passWord=
```

| | | |
|-------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>volumeName</i> | Optional | The name of the volume |

| | | |
|--------------------|----------|---|
| <i>searchDepth</i> | Optional | Which objects to inspect 1 - Volumes only, 2 - Volumes and snapshots, 3 - Volumes, snapshots and remote snapshots (default). The greater the search depth number, the longer the call can take. |
| <i>verbose</i> | Optional | How much information to return 0 - Get summary information only (better performance), 1 - Get all information (better information - default). The greater the verbose number, the longer the call can take. |

Response Syntax

```
VOLUME ...
STATUS ...
REMOTESNAPSHOT ...
SNAPSHOT ...
SCHEDULE ...
PERMISSION ...
```

| | |
|-----------------------|--|
| <i>VOLUME</i> | This section contains volume information. |
| <i>STATUS</i> | This section contains status information. |
| <i>REMOTESNAPSHOT</i> | This section contains remote snapshot information. |
| <i>SNAPSHOT</i> | This section contains snapshot information. |
| <i>SCHEDULE</i> | This section contains schedule information. |
| <i>PERMISSION</i> | This section contains permission information. |

Example

```
cliq getVolumeInfo volumeName=volume0 login=10.1.2.3 userName=admin
passWord=secret

cliq getVolumeInfo volumeName=volume0
```

getVolumeControllingServer

This command is used to retrieve the application managed snapshot controlling server of a volume.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq getVolumeControllingServer login= userName= passWord= volumeName=
```

| | | |
|-------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters userName/passWord or groupName must be specified). |
| <i>volumeName</i> | Required | The name of the volume |

Example

```
cliq getVolumeControllingServer login=10.0.1.2 userName=admin
passWord=secret volumeName="The Volume"

cliq getVolumeControllingServer volumeName="The Volume"
```

help

This command returns information about the currently supported API command set.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq help command=

command    Optional    A specific command for more detailed help informationNote: if help is
                        specified with no parameters, a list of possible return codes is returned
```

Example

```
cliq help command=getSystemInfo

cliq help command=getSystemInfo
```

makePrimary

This command promotes a remote volume to a primary production volume.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq makePrimary login= userName= passWord= volumeName= size=
```

| | | |
|----------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>volumeName</i> | Required | The name of the volume |
| <i>size</i> | Optional | The size of the volume, with units specified: <n>MB - n Megabytes (1024 Kilobytes), <n>GB - n Gigabytes (1024 Megabytes), <n>TB - n Terabytes (1024 Gigabytes) |
| <i>thinProvision</i> | Optional | 0 = the volume does not use thin-provisioning, 1 = The volume is thin-provisioned (in a thinly provisioned volume, reserve may be < length) |

Example

```
cliq makePrimary login=10.1.2.3 userName=admin passWord=secret  
volumeName="TheVolume" size=1GB  
  
cliq makePrimary volumeName="TheVolume" size=1GB
```

makeRemote

This command demotes a primary volume to a remote snapshot target.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq makeRemote login= userName= passWord= volumeName= snapshotName=
```

| | | |
|---------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters userName/passWord or groupName must be specified). |
| <i>volumeName</i> | Required | The name of the volume |
| <i>snapshotName</i> | Required | The name of the remote snapshot |

Example

```
cliq makeRemote login=10.1.2.3 userName=admin passWord=secret  
volumeName="TheVolume" snapshotName="TheSnapshot "  
  
cliq makeRemote volumeName="TheVolume" snapshotName="TheSnapshot "
```

modifyAdminGroup

This command modifies one or more properties of the SAN administrative group.

Availability: Windows, SSH

Version: 8.0

Warnings

If the adminUserName parameter is used, all user ids that are currently in the group that are not included with this parameter will be removed.

Request Syntax

```
cliq modifyAdminGroup login= userName= passWord= description= adminGroupName=  
adminUserName= permissions=
```

| | | |
|--------------|----------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
|--------------|----------|---|

| | | |
|-----------------------|-------------|---|
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>adminGroupName</i> | Required | The administrative group name |
| <i>adminUserName</i> | Optional | Specifies the users that this group comprises. |
| <i>description</i> | Optional | Optional description |
| <i>permissions</i> | Optional | Permissions for the group. This is a character sequence specifying the allowable permissions in the following order: Group,Network,Storage System,Report. The Password permissions are subsumed by the Group permissions.For each group, the allowable permissions are: r - read-only, w - read-write (Report does not support this), f - full-access (Report does not support this)For example:Note: if this is not specified, the permissions are set to rrrr |
| <i>adGroup</i> | Optional | The name of the associated active directory group. |

Example

```
cliq modifyAdminGroup login=10.0.1.3 userName=admin passWord=secret
description="My shiny new group" adminGroupName=PowerUsers
adminUserName=user1;user2 permissions=fffr

cliq modifyAdminGroup description="My shiny new group"
adminGroupName=PowerUsers adminUserName=user1;user2 permissions=fffr
```

modifyAdminUser

This command modifies an administrative user.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq modifyAdminUser login= userName= passWord= description= adminUserName=
adminPassWord=
```

| | | |
|----------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>adminUserName</i> | Required | Specifies the users that this group comprises. |
| <i>description</i> | Optional | Optional description |
| <i>adminPassWord</i> | Optional | The password for the administrative user |

Example

```
cliq modifyAdminUser login=10.0.1.3 userName=admin passWord=secret
description="My shiny new user" adminUserName=user
adminPassWord=secret

cliq modifyAdminUser description="My shiny new user"
adminUserName=user adminPassWord=secret
```

modifyCluster

This command changes settings on a cluster.

Availability: Windows, SSH

Version: 8.0

Warnings

Modifying a cluster will cause a restripe of every volume in the cluster.

Request Syntax

```
cliq modifyCluster clusterName= login= userName= passWord= description= useVip=
node= vip=
```

| | | |
|--------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>clusterName</i> | Required | The name of the cluster |
| <i>newName</i> | Optional | The new name for the cluster |
| <i>description</i> | Optional | Optional description |
| <i>useVip</i> | Optional | Should virtual IP (VIP) addressing be used? This can be one of: 0, 1 - default |
| <i>node</i> | Optional | The delimited list of node names or IP addresses, or DNS-resolvable node names of the storage systems the cluster comprises. |
| <i>vip</i> | Optional | A delimited list of virtual IP address or DNS-resolvable name and subnet mask. Note: since each VIP contains two parameters, IP address and subnet mask, both must be specified in order, even if empty. If multiple vips are entered, they must be on different subnets. |

Example

```
cliq modifyCluster clusterName=TheCluster login=10.0.1.3
userName=admin passWord=secret description="My
shiny new cluster" useVip=1 node=10.1.2.4
vip=10.1.2.99;255.255.0.0;150.215.017.009;255.255.240.0

cliq modifyCluster clusterName=TheCluster description="My
shiny new cluster" useVip=1 node=10.1.2.4
vip=10.1.2.99;255.255.0.0;150.215.017.009;255.255.240.0
```


modifyEmailNotifyPolicy

This command modifies an Email Notification Policy.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq modifyEmailNotifyPolicy login= userName= passWord= email= verbosity=
```

| | | |
|------------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>email</i> | Required | The email address of the recipient. |
| <i>verbosity</i> | Optional | The level of returned information via email notification. 1 - brief, 2 - standard, 3 - verbose |
| <i>alertOnInfo</i> | Conditional | Values are: 0 = email will not be sent on informational events and, 1 = email will be sent for informational events. The default is 0 for <i>createEmailNotifyPolicy</i> . (A combination of parameters <i>alertOnInfo</i> or <i>alertOnWarning</i> or <i>alertOnCritical</i> must be specified). |
| <i>alertOnWarning</i> | Conditional | Values are: 0 = email will not be sent on warning events and, 1 = email will be sent for warning events. The default is 0 for <i>createEmailNotifyPolicy</i> . (A combination of parameters <i>alertOnInfo</i> or <i>alertOnWarning</i> or <i>alertOnCritical</i> must be specified). |
| <i>alertOnCritical</i> | Conditional | Values are: 0 = email will not be sent on critical events and, 1 = email will be sent for critical events. The default is 0 for <i>createEmailNotifyPolicy</i> . (A combination of parameters <i>alertOnInfo</i> or <i>alertOnWarning</i> or <i>alertOnCritical</i> must be specified). |
| <i>emailLocale</i> | Optional | English (default), Chinese, Japanese, Korean |

Example

```
cliq modifyEmailNotifyPolicy login=10.0.1.3 userName=admin  
passWord=secret email="myemail@myhost.com" alertOnCritical=1  
  
cliq modifyEmailNotifyPolicy email="myemail@myhost.com"  
alertOnCritical=1
```

modifyGroup

This command changes settings on a management group.

Availability: Windows, SSH

Version: 8.0

Warnings

This operation is irreversible.

Request Syntax

```
cliq modifyGroup login= userName= passWord= node=
```

| | | |
|--------------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>node</i> | Optional | The delimited list of node names or IP addresses, or DNS-resolvable node names of the storage systems the cluster comprises. |
| <i>bandwidthPriority</i> | Optional | The manager bandwidth Kb = Kilobits/sec (1000 Bits/second), Mb = Megabits/sec (1000 Kilobits/second), Gb = Gigabits/sec (1000 Megabits/second) |
| <i>customerName</i> | Optional | Customer name |
| <i>supportId</i> | Optional | Support ID provided by HP StoreVirtual |
| <i>contactName</i> | Optional | Contact name |
| <i>postalAddress</i> | Optional | Postal address line 1 |
| <i>postalAddress2</i> | Optional | Postal address line 2 |
| <i>cityName</i> | Optional | Postal city |
| <i>stateName</i> | Optional | Postal state |
| <i>countryName</i> | Optional | Postal country |
| <i>postalCode</i> | Optional | Postal code |
| <i>telephoneNumber</i> | Optional | Contact telephone number |
| <i>emailaddress</i> | Optional | The notification email. |

Example

```
cliq modifyGroup login=10.0.1.2 userName=admin passWord=secret
node=10.0.1.2;10.0.1.3

cliq modifyGroup node=10.0.1.2;10.0.1.3
```

modifyNSM

This command changes NSM fibrechannel port states between enabled and disabled.

Availability: Windows, SSH

Version: 10.0

Request Syntax

```
cliq modifyNSM login= userName= passWord= fcenabled=
```

| | | |
|------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |

| | | |
|------------------|----------|--|
| <i>fcenabled</i> | Required | Enable or disable the fibrechannel port(s). This can be one of: 0 - disable, 1 - enable. Default is 0. If a WWPN is entered, this value will stay at its default value of 0 unless specifically set by using this parameter. |
|------------------|----------|--|

Example

```
cliq modifyNSM login=10.0.1.2 userName=admin passWord=secret
fcenabled=1
```

modifyRemoteAssociation

This command modifies a previously created remote volume association.

Availability: Windows, SSH

Version: 8.0

Warnings

This operation is irreversible.

Request Syntax

```
cliq modifyRemoteAssociation login= userName= passWord= remote= remoteUserName=
remotePassWord= remoteBandwidth=
```

| | | |
|-------------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>remote</i> | Required | The IP address or DNS-resolvable names of one or more remote storage system |
| <i>remoteUserName</i> | Optional | The authentication user name for the remote group |
| <i>remotePassWord</i> | Optional | The password for the remote group |
| <i>primaryBandwidth</i> | Optional | The bandwidth used in a copy from the primary group to the remote group. Kb = Kilobits/sec (1000 Bits/second), Mb = Megabits/sec (1000 Kilobits/second), Gb = Gigabits/sec (1000 Megabits/second) |
| <i>remoteBandwidth</i> | Optional | The bandwidth used in a copy from the remote group to the primary group. Kb = Kilobits/sec (1000 Bits/second), Mb = Megabits/sec (1000 Kilobits/second), Gb = Gigabits/sec (1000 Megabits/second) |
| <i>remotegroupname</i> | Optional | The name of the remote management group. |

Example

```
cliq modifyRemoteAssociation login=10.0.1.2 userName=admin
passWord=secret remote=10.0.1.3 remoteUserName=admin
remotePassWord=secret remoteBandwidth=10Mb

cliq modifyRemoteAssociation remote=10.0.1.3 remoteUserName=admin
remotePassWord=secret remoteBandwidth=10Mb
```


modifyRemoteSnapshotSchedule

This command modifies a previously created remote snapshot schedule.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq modifyRemoteSnapshotSchedule scheduleName= login= userName= passWord=
remoteretentioncount=
```

| | | |
|-------------------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>scheduleName</i> | Required | The name of the schedule |
| <i>remoteretentioncount</i> | Optional | The number of remote snapshots to maintain. Must be between 1 and 50. Either <i>remoteretentioncount</i> or <i>remoteretentionseconds</i> must be specified. |
| <i>remoteretentionseconds</i> | Optional | How long remote snapshots should be retained. Either <i>remoteretentioncount</i> or <i>remoteretentionseconds</i> must be specified. |

Example

```
cliq modifyRemoteSnapshotSchedule scheduleName="TheSchedule"
login="10.0.1.2" userName="admin" passWord="secret"
remoteretentioncount="10"

cliq modifyRemoteSnapshotSchedule scheduleName="TheSchedule"
remoteretentioncount="10"
```

modifyServer

This command modifies a server.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq modifyServer serverName= useCHAP= initiator= login= userName= passWord=
```

| | | |
|------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |

| | | |
|--------------------------|----------|---|
| <i>serverName</i> | Required | The name of the server |
| <i>description</i> | Optional | Optional description |
| <i>allowiSCSIAccess</i> | Optional | Allow iSCSI access for this host. This can be one of: 0 = disable or 1 = enable. If volumes are attached to a client server via iSCSI and a value of 0 is entered, the client server will lose its ability to communicate with the attached volumes. If an IQN is entered and FibreChannel is NOT configured, the default will be 1, otherwise no default will be selected. |
| <i>vipLoadBalance</i> | Optional | Use VIP load balancing for this host. This can be one of: 0 = disabled or 1 = enabled, 1 is the default. |
| <i>useCHAP</i> | Optional | Use CHAP Authentication this host. This can be one of: 0 = disabled or 1 = enabled. |
| <i>initiator</i> | Optional | A semicolon delimited string of host IQN's. Valid characters are any letter, number, international character or '-', '.' and ':' characters. |
| <i>targetSecret</i> | Optional | The CHAP target secret for the volume. |
| <i>chapName</i> | Optional | The CHAP name for the volume. If this is not specified, the IQN of the local server is used (this parameter is required if run on a storage system). |
| <i>initiatorSecret</i> | Optional | The CHAP initiator secret for the volume. |
| <i>controllingserver</i> | Optional | Enter the IP address of the client server that has Application Aware Snapshot Manager (AASM) installed on it. It will coordinate the snapshot with the applications using SAN volumes. This is required for managed snapshots of FibreChannel connected volumes. This is also required for VMware managed snapshots, enter the Virtual Center Server IP address. |
| <i>allowfcaccess</i> | Optional | Allow FibreChannel ports to be assigned to the client. This can be one of: 0 = disable or 1 = enable. If volumes are attached to a client server via FibreChannel and a value of 0 is entered, the client will lose its ability to communicate with the attached volumes. |
| <i>wwpn</i> | Optional | A semicolon delimited list of the unique World Wide Port Name for one or more FibreChannel ports. Expected WWPN formatting is 16 Hex characters with or without the ':' character as a delimiter. For example: 20:21:00:0E:B3:01:AB:C6 or 2021000EB301ABC6. Lower case hex characters a-f are also accepted. |
| <i>bootvolumelun</i> | Optional | The LUN (1-255) of the boot volume. Valid only for a FibreChannel attached volume. (Note: LUN 255 not supported by Microsoft Windows) |
| <i>bootvolumename</i> | Optional | The volume name of the boot volume. Valid only for a FibreChannel attached volume. |

Example

```
cliq modifyServer serverName=TheServer useCHAP=0
initiator=iqn.1991-05.com.microsoft:w-gregorio.corp.mynetworks.com
login=10.0.1.2 userName=admin passWord=secret

cliq modifyServer serverName=TheServer useCHAP=0
initiator=iqn.1991-05.com.microsoft:w-gregorio.corp.mynetworks.com
```

modifySite

This command modifies a site in a multi-site SAN.

Availability: Windows, SSH

Version: 8.0

Warnings

This operation is irreversible.

Request Syntax

```
cliq modifySite siteName= description= login= userName= passWord=
```

| | | |
|--------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>siteName</i> | Required | The name of the site |
| <i>node</i> | Optional | The delimited list of node names or IP addresses, or DNS-resolvable node names of the storage systems the cluster comprises. |
| <i>description</i> | Optional | Optional description |
| <i>primary</i> | Optional | This site is the primary site. This can be one of: 0 = disabled or 1 = enabled, 1 is the default |

Example

```
cliq modifySite siteName=TheSite description="My Site" login=10.0.1.2  
userName=admin passWord=secret
```

```
cliq modifySite siteName=TheSite description="My Site"
```

modifySnapshot

This command modifies snapshot settings.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq modifySnapshot description= login= userName= passWord= snapshotName=
```

| | | |
|----------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>snapshotName</i> | Required | The name of the remote snapshot |
| <i>description</i> | Optional | Optional description |
| <i>scratchQuota</i> | Optional | The scratch quota for the volume, as a percentage or size - this is the size guaranteed to be available for snapshots of this volume, regardless of space allocated to other objects in the system |
| <i>autogrowpages</i> | Optional | Automatically grow the pages. |

Example

```
cliq modifySnapshot description="New Description" login=10.0.1.2
userName=admin passWord=secret snapshotName=TheSnapshot

cliq modifySnapshot description="New Description"
snapshotName=TheSnapshot
```

modifySnapshotSchedule

This command modifies a previously created snapshot schedule.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq modifySnapshotSchedule scheduleName= description= login= userName= passWord=
```

| | | |
|-------------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters userName/passWord or groupName must be specified). |
| <i>scheduleName</i> | Required | The name of the schedule |
| <i>description</i> | Optional | Optional description |
| <i>recurperiod</i> | Optional | The recurrence frequency of the snapshots, specified in seconds. Period may be 0 to indicate the schedule never occurs, otherwise Period must be at least 1800 seconds (30 minutes). |
| <i>starttime</i> | Optional | The start time of the schedule. Specified as ISO 8601. Format is YYYY-MM-DDTHH:MM:SSZ. YYYY represents the year, MM is the month, DD is the day of the month, HH is the hour in 24 hour format, MM is the minute, SS is the seconds. The time must always be expressed in GMT time. |
| <i>retentioncount</i> | Optional | The number of snapshots to maintain. Must be between 1 and 50. Either retentioncount or retentionseconds must be specified. |
| <i>retentionseconds</i> | Optional | How long snapshots should be retained. Either retentioncount or retentionseconds must be specified. |
| <i>paused</i> | Optional | State of the snapshot schedule. This can be one of: 0 - schedule is not paused, 1 - schedule is paused |

Example

```
cliq modifySnapshotSchedule scheduleName="TheSchedule"
description="First snapshot schedule" login="10.0.1.2"
userName="admin" passWord="secret"

cliq modifySnapshotSchedule scheduleName="TheSchedule"
description="First snapshot schedule"
```


modifySnmpCommunityString

This command modifies the Community String for all SNMP.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq modifySnmpCommunityString login= userName= passWord= communityString=
```

| | | |
|------------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters userName/passWord or groupName must be specified). |
| <i>communityString</i> | Required | The SNMP community string. |

Example

```
cliq modifySnmpCommunityString login=10.0.1.3 userName=admin  
passWord=secret communityString="NewString"  
  
cliq modifySnmpCommunityString communityString="NewString"
```

modifySnmpTrapTarget

This command modifies an SNMP Trap Target.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq modifySnmpTrapTarget login= userName= passWord= communityString=
```

| | | |
|------------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters userName/passWord or groupName must be specified). |
| <i>communityString</i> | Required | The SNMP community string. |

Example

```
cliq modifySnmpTrapTarget login=10.0.1.3 userName=admin  
passWord=secret communityString="TheString"  
  
cliq modifySnmpTrapTarget communityString="TheString"
```

modifySyslogNotifyPolicy

This command modifies a Syslog Notification Policy.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq modifySyslogNotifyPolicy login= userName= passWord= ipAddress= alertOnInfo=
```

| | | |
|------------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>ipAddress</i> | Required | This is the IP address or Host Name to be configured. |
| <i>alertOnInfo</i> | Conditional | Values are: 0 = the log does not includes informational events and, 1 = the log includes informational events. The default is 0 for <i>createSyslogNotifyPolicy</i> . (A combination of parameters <i>alertOnInfo</i> or <i>alertOnWarning</i> or <i>alertOnCritical</i> must be specified). |
| <i>alertOnWarning</i> | Conditional | Values are: 0 = the log does not includes warning events and, 1 = the log includes warning events. The default is 0 for <i>createSyslogNotifyPolicy</i> . (A combination of parameters <i>alertOnInfo</i> or <i>alertOnWarning</i> or <i>alertOnCritical</i> must be specified). |
| <i>alertOnCritical</i> | Conditional | Values are: 0 = the log does not includes critical events and, 1 = the log includes critical events. The default is 0 for <i>createSyslogNotifyPolicy</i> . (A combination of parameters <i>alertOnInfo</i> or <i>alertOnWarning</i> or <i>alertOnCritical</i> must be specified). |

Example

```
cliq modifySyslogNotifyPolicy login=10.0.1.3 userName=admin  
passWord=secret ipAddress="10.0.10.25" alertOnInfo="1"  
  
cliq modifySyslogNotifyPolicy ipAddress="10.0.10.25" alertOnInfo="1"
```

modifyVolume

This command modifies volume settings.

Availability: Windows, SSH

Version: 8.0

Warnings

Using a stridePages value other than the default may impact volume IO performance.

Using an initialQuota value other than the default may impact volume IO performance.

Enabling checksums may impact volume IO performance.

Changing the replication level of this volume will cause it to restripe, and may impact IO performance.

Request Syntax

```
cliq modifyVolume description= login= userName= passWord= volumeName=
```

| | | |
|------------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>volumeName</i> | Required | The name of the volume |
| <i>description</i> | Optional | Optional description |
| <i>replication</i> | Optional | The replication level for the volume (1 2 3 4) |
| <i>parity</i> | Optional | The number of parity storage systems for the data on this volume. This enables parity network RAID on the volume. Replication and parity are supported in the following combinations: replication:1, parity:0 Network RAID-0 (None), replication:2, parity:0 Network RAID-10 (2-way Mirror), replication:3, parity:0 Network RAID-10+1 (3-way Mirror), replication:4, parity:0 Network RAID-10+2 (4-way Mirror), replication:2, parity:1 Network RAID-5 (Single parity), replication:3, parity:2 Network RAID-6 (Dual Parity) |
| <i>checkSum</i> | Optional | 0 - the volume does not use checksums 1 - the volume uses checksums |
| <i>thinProvision</i> | Optional | 0 = the volume does not use thin-provisioning, 1 = The volume is thin-provisioned (in a thinly provisioned volume, reserve may be < length) |
| <i>autogrowSeconds</i> | Optional | The amount to grow the volume when it is thin-provisioned and new pages must be added, based on the current growth rate - a value of 0 means no autogrow |
| <i>clusterName</i> | Optional | The name of the cluster |
| <i>size</i> | Optional | The size of the volume, with units specified: <n>MB - n Megabytes (1024 Kilobytes), <n>GB - n Gigabytes (1024 Megabytes), <n>TB - n Terabytes (1024 Gigabytes) |
| <i>autogrowpages</i> | Optional | Automatically grow the pages. |

Example

```
cliq modifyVolume description="New Description" login=10.0.1.2
  userName=admin passWord=secret volumeName=TheVolume

cliq modifyVolume description="New Description" volumeName=TheVolume
```


mountVolume

This command mounts a volume to the specified mount point.

Availability: Windows

Version: 8.0

Warnings

Prior to mounting the volume, the volume must be assigned to the server (assignVolume) and connected (connectVolume).

Request Syntax

```
cliq mountVolume groupName= volumeName= mountpoint= create=
```

| | | |
|--------------------|----------|---|
| <i>groupName</i> | Required | The name of the management group |
| <i>volumeName</i> | Required | The name of the volume |
| <i>mountPoint</i> | Required | The drive letter or mount point on the host for the volume (LUN will be uninitialized if not specified) |
| <i>forcecreate</i> | Optional | Create if it does not exist. |

Example

```
cliq mountVolume groupName=MG2 volumeName=TheVolume mountPoint=z:
```

provisionVolume

This command creates a volume and connects it to the local host (iSCSI only).

Availability: Windows

Version: 8.0

Warnings

Using a stridePages value other than the default may impact volume IO performance.

Using an initialQuota value other than the default may impact volume IO performance.

Enabling checksums may impact volume IO performance.

Changing the replication level of this volume will cause it to restripe, and may impact IO performance.

Request Syntax

```
cliq provisionVolume clusterName= volumeName= description= size= mountPoint= login=
userName= passWord=
```

| | | |
|-----------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |

| | | |
|------------------------|-------------|---|
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>clusterName</i> | Required | The name of the cluster |
| <i>volumeName</i> | Required | The name of the volume |
| <i>size</i> | Required | The size of the volume, with units specified: <n>MB - n Megabytes (1024 Kilobytes), <n>GB - n Gigabytes (1024 Megabytes), <n>TB - n Terabytes (1024 Gigabytes) |
| <i>description</i> | Optional | Optional description |
| <i>replication</i> | Optional | The replication level for the volume (1 2 3 4) |
| <i>parity</i> | Optional | The number of parity storage systems for the data on this volume. This enables parity network RAID on the volume. Replication and parity are supported in the following combinations: replication:1, parity:0 Network RAID-0 (None), replication:2, parity:0 Network RAID-10 (2-way Mirror), replication:3, parity:0 Network RAID-10+1 (3-way Mirror), replication:4, parity:0 Network RAID-10+2 (4-way Mirror), replication:2, parity:1 Network RAID-5 (Single parity), replication:3, parity:2 Network RAID-6 (Dual Parity) |
| <i>checksum</i> | Optional | 0 - the volume does not use checksums 1 - the volume uses checksums |
| <i>thinProvision</i> | Optional | 0 = the volume does not use thin-provisioning, 1 = The volume is thin-provisioned (in a thinly provisioned volume, reserve may be < length) |
| <i>mountPoint</i> | Optional | The drive letter or mount point on the host for the volume (LUN will be uninitialized if not specified) |
| <i>namePrefix</i> | Optional | A prefix string for newly created objects. A unique number value will be concatenated to this prefix to guarantee name uniqueness. |
| <i>vipLoadBalance</i> | Optional | Use VIP load balancing for this host. This can be one of: 0 = disabled or 1 = enabled, 1 is the default. |
| <i>targetSecret</i> | Optional | The CHAP target secret for the volume. |
| <i>chapName</i> | Optional | The CHAP name for the volume. If this is not specified, the IQN of the local server is used (this parameter is required if run on a storage system). |
| <i>initiatorSecret</i> | Optional | The CHAP initiator secret for the volume. |

Example

```
cliq provisionVolume clusterName=TheCluster volumeName=TheVolume
description=NewVolume size=100GB mountPoint=z: login=10.0.1.2
userName=admin passWord=secret
```

rebalanceVip

This command rebalances the connections to a volume when using a virtual IP address.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq rebalanceVip volumeName= login= userName= passWord=
```

| | | |
|-----------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |

| | | |
|-------------------|-------------|---|
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>volumeName</i> | Required | The name of the volume |

Example

```
cliq rebalanceVip volumeName=MyVolume login=10.1.2.3 userName=admin
passWord=secret
cliq rebalanceVip volumeName=MyVolume
```

recoverQuorum

This command is used to rescue a management group after quorum has been irretrievably lost. This command needs to be run on a storage system with a working manager so it can retrieve the management group database from that manager to restore the management group. **WARNING:** Once you have chosen to proceed with the recover quorum operation, there is no way to undo the effects. If possible, it is highly recommended that you attempt to recover quorum instead by bringing up any offline managers that might still be accessible. As part of the recover quorum operation, all configured managers that are offline will be deleted from the management group and all storage servers that are offline will be ejected from the management group and cluster(s).

Availability: Windows, SSH

Version: 8.0

Warnings

Contact support before proceeding. Only use the Recover Quorum command when actively working with support personnel and they direct you to invoke the command.

Request Syntax

```
cliq recoverQuorum login= userName= passWord=
```

| | | |
|------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |

Example

```
cliq recoverQuorum login=10.1.2.3 userName=admin passWord=secret
cliq recoverQuorum
```


removeSnapshot

This command disconnects a SAN snapshot from the host, then deletes it. If the snapshot cannot be disconnected (because it's in use, or for any other reason), it will not be deleted.

Availability: Windows

Version: 8.5

Request Syntax

```
cliq removeSnapshot snapshotName= login= userName= passWord=
```

| | | |
|---------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>snapshotName</i> | Required | The name of the remote snapshot |

Example

```
cliq removeSnapshot snapshotName=z: login=10.0.1.2 userName=admin  
passWord=secret
```

removeVolume

This command disconnects a SAN volume from the host, then deletes it. If the volume cannot be disconnected (because it's in use, or for any other reason), it will not be deleted.

Availability: Windows

Version: 8.0

Request Syntax

```
cliq removeVolume volumeName= login= userName= passWord=
```

| | | |
|-------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>volumeName</i> | Required | The name of the volume |

Example

```
cliq removeVolume volumeName=z: login=10.0.1.2 userName=admin  
passWord=secret
```


resetSession

This command resets the iSCSI session associated with a volume. Some initiators will attempt to reconnect after the reset.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq resetSession volumeName= login= userName= passWord=
```

| | | |
|-------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>volumeName</i> | Required | The name of the volume |
| <i>initiator</i> | Optional | A semicolon delimited string of host IQN's. If this is not specified, the IQN of the local server is used (this parameter is required if run on a storage system). Valid characters are any letter, number, international character or '-', '.' and ':' characters. |

Example

```
cliq resetSession volumeName=MyVolume login=10.1.2.3 userName=admin  
passWord=secret  
  
cliq resetSession volumeName=MyVolume
```

rollbackSnapshot

This command rolls back a snapshot. WARNING: The rollbackSnapshot command will replace the original volume with a new one based on the contents of the snapshot and delete any snapshots created after the snapshot which is being rolled back.

Availability: Windows, SSH

Version: 8.0

Warnings

If the original volume is specified, this will replace it with a new volume based on the contents of the snapshot and delete any snapshots created after the snapshot being rolled back.

Request Syntax

```
cliq rollbackSnapshot snapshotName= login= userName= passWord=
```

| | | |
|--------------|----------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
|--------------|----------|---|

| | | |
|---------------------|-------------|---|
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>snapshotName</i> | Required | The name of the remote snapshot |
| <i>description</i> | Optional | Optional description |

Example

```
cliq rollbackSnapshot snapshotName=TheSnapshot login=10.0.1.2
  userName=admin passWord=secret

cliq rollbackSnapshot snapshotName=TheSnapshot
```

runDiagnostic

This command runs one or all storage system diagnostics.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq runDiagnostic login= userName= passWord= diagnosticName=
```

| | | |
|-----------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>diagnosticName</i> | Optional | The name of the diagnostic to run (if unspecified, all diagnostics are listed; if "*" is specified, all are run) |

Example

```
cliq runDiagnostic login=10.0.1.2 userName=admin passWord=secret
  diagnosticName=drvstat

cliq runDiagnostic diagnosticName=drvstat
```

setADInfo

This command sets the active directory association and configuration of the management group.

Availability: Windows, SSH

Version: 10.0

Request Syntax

```
cliq setADInfo login= userName= passWord=
```


| | | |
|---------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>adServer</i> | Required | The active directory host. |
| <i>baseDN</i> | Required | The base DN. |
| <i>bindUserName</i> | Optional | An active directory user name used to query the Active Directory infrastructure. |
| <i>bindPassWord</i> | Optional | The active directory password for the binduser. |
| <i>userContext</i> | Optional | The user context. |
| <i>testOnly</i> | Optional | Set this flag to true to test the configuration only, not set it, default is false. |
| <i>ldaps</i> | Optional | Use secure ldap connection, set it to false to change, default is true. |

Example

```
cliq setADInfo login=10.0.1.3 userName=admin passWord=secret
bindUserName=user adServer=ldap://10.0.1.25 baseDN="win8dom,DC=com"
userContext=private testOnly=true ldaps=false

cliq setADInfo adServer=ldap://10.0.1.25 baseDN=2
```

setAlertsPolicy

This command sets information for the Alerts and Events Policy.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq setAlertsPolicy login= userName= passWord= aging=
```

| | | |
|------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName/passWord</i> or <i>groupName</i> must be specified). |
| <i>aging</i> | Required | The aging in months. |

Example

```
cliq setAlertsPolicy login=10.0.1.3 userName=admin passWord=secret
aging="2"

cliq setAlertsPolicy aging="2"
```


setAutoMountPolicy

This command sets the auto-mount policy for the HP StoreVirtual Recovery Manager application on this computer.

Availability: Windows

Version: 10.0

Warnings

The HP StoreVirtual Recovery Manager must be installed on the system to implement automount polices defined by the CLIQ. When running the command, if no groupName parameter is supplied, default credentials will be modified.

Request Syntax

```
cliq setAutoMountPolicy groupName= volumeName=
retentioncount= mountpoint=
paused=
```

| | | |
|-----------------------|----------|--|
| <i>groupName</i> | Optional | The name of the management group |
| <i>volumeName</i> | Optional | The name of the volume |
| <i>retentioncount</i> | Optional | The retention count. |
| <i>mountPoint</i> | Optional | The mount point. |
| <i>paused</i> | Optional | State of the snapshot schedule. This can be one of: 0 - schedule is not paused, 1 - schedule is paused |

Example

```
cliq setAutoMountPolicy
cliq setAutoMountPolicy
```

setDnsInfo

This command sets information for DNS.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq setDnsInfo login= userName= passWord= server= suffix= domainname=
```

| | | |
|-------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters userName/passWord or groupName must be specified). |
| <i>domainname</i> | Optional | The domain name. |
| <i>suffix</i> | Optional | DNS suffixes. |

server Optional List of DNS servers, IP addresses.

Example

```
cliq setDnsInfo login=10.0.1.3 userName=admin passWord=secret
server=10.23.0.101 suffix=suffix1;suffix2 domainname=domainname

cliq setDnsInfo server=10.23.0.101 suffix=suffix1;suffix2
domainname=domainname
```

setEmailServerInfo

This command sets the configuration information for the email server used to email alerts to configured recipients.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq setEmailServerInfo login= userName= passWord= ipAddress= portNumber= email=
```

| | | |
|-------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>ipAddress</i> | Optional | This is the IP address or Host Name to be configured. |
| <i>email</i> | Optional | The email address of the sender. |
| <i>portNumber</i> | Optional | The Port Number to send email on. |

Example

```
cliq setEmailServerInfo login=10.0.1.3 userName=admin passWord=secret
ipAddress=10.23.0.101 portNumber=2309 email=anyemail@myhost.com

cliq setEmailServerInfo ipAddress=10.23.0.101 portNumber=2309
email=anyemail@myhost.com
```

setGossipList

This command sets the gossip list on a storage system. In the normal case, the gossip list is managed by the LeftHand OS agent. This is a backup mechanism that the API provides for imposing this if it's set incorrectly.

Availability:

Version: future

Warnings

This operation is irreversible.

Request Syntax


```
cliq setGossipList login= userName= passWord= node=
```

| | | |
|------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>node</i> | Required | The delimited list of node names or IP addresses, or DNS-resolvable node names of the storage systems the cluster comprises. |

Example

```
cliq setGossipList login=10.0.1.2 userName=admin passWord=secret  
node=10.0.1.3;10.0.1.4  
  
cliq setGossipList node=10.0.1.3;10.0.1.4
```

setLicenseKey

This command sets the license key on a storage system.

Availability: Windows, SSH

Version: 8.5

Request Syntax

```
cliq setLicenseKey login= userName= passWord= licenseKey=
```

| | | |
|-------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>licenseKey</i> | Required | license key obtained from HP |

Example

```
cliq setLicenseKey login=10.0.1.2 userName=admin  
passWord=secret licenseKey=0447-10AB-A698-  
AB5A-318D-86B0-FAA8-454A-63B7-3B2B-00F5-11F5-62EF-9270-  
E91A-0340-09A2-ABA1-8E87-7BAF-E527-E905-0DE2-E921-34A1-  
A730-737B-718C-9063-7183-8CAF-4B3E-25  
  
cliq setLicenseKey licenseKey=0447-10AB-A698-  
AB5A-318D-86B0-FAA8-454A-63B7-3B2B-00F5-11F5-62EF-9270-  
E91A-0340-09A2-ABA1-8E87-7BAF-E527-E905-0DE2-E921-34A1-  
A730-737B-718C-9063-7183-8CAF-4B3E-25
```


setSnmpNotifyPolicy

This command sets SNMP Notification Policy settings.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq setSnmpNotifyPolicy login= userName= passWord= verbosity= alertOnCritical=
```

| | | |
|------------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>verbosity</i> | Optional | The level of returned information via email notification. 1 - brief, 2 - standard, 3 - verbose |
| <i>alertOnInfo</i> | Conditional | Values are: 0 = do not transmit informational events and, 1 = transmit informational events. (A combination of parameters <i>alertOnInfo</i> or <i>alertOnWarning</i> or <i>alertOnCritical</i> must be specified). |
| <i>alertOnWarning</i> | Conditional | Values are: 0 = do not transmit warning events and, 1 = transmit warning events. (A combination of parameters <i>alertOnInfo</i> or <i>alertOnWarning</i> or <i>alertOnCritical</i> must be specified). |
| <i>alertOnCritical</i> | Conditional | Values are: 0 = do not transmit critical events and, 1 = transmit critical events. (A combination of parameters <i>alertOnInfo</i> or <i>alertOnWarning</i> or <i>alertOnCritical</i> must be specified). |

Example

```
cliq setSnmpNotifyPolicy login=10.0.1.3 userName=admin  
passWord=secret alertOnWarning=1  
  
cliq setSnmpNotifyPolicy alertOnWarning=1
```

setSnmpServiceInfo

This command sets information about the SNMP Service.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq setSnmpServiceInfo login= userName= passWord= contactinfo= location=
```

| | | |
|-----------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |

| | | |
|--------------------|-------------|---|
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>contactinfo</i> | Optional | Contact information. |
| <i>location</i> | Optional | Location information. |

Example

```
cliq setSnmpServiceInfo login=10.0.1.3 userName=admin passWord=secret
contactinfo="Mr Douglas" location="main office"

cliq setSnmpServiceInfo contactinfo="Mr Douglas" location="main
office"
```

shutdownGroup

This command forces a soft shutdown of a management group.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq shutdownGroup login= userName= passWord=
```

| | | |
|------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |

Example

```
cliq shutdownGroup login=10.0.1.2 userName=admin passWord=secret
cliq shutdownGroup
```

shutdownNsm

This command shuts down a storage system.

Availability: Windows, SSH

Version: 8.0

Warnings

Shutting down a storage node may cause loss of access to volumes or degrade performance.

Request Syntax

```
cliq shutdownNsm action= delay= login= userName= passWord=
```


| | | |
|------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>action</i> | Required | The operation to perform. This can be one of: Shutdown - powers off the storage system, Restart - reboots the storage system, Cancel - cancels a restart or shutdown if pending |
| <i>delay</i> | Optional | The number of minutes to delay prior to shutdown or restart (defaults to 0) |

Example

```
cliq shutdownNsm action=Restart delay=10 login=10.0.1.2
  userName=admin passWord=secret
cliq shutdownNsm action=Restart delay=10
```

startManager

This command starts the manager on a storage system.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq startManager login= userName= passWord=
```

| | | |
|------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |

Example

```
cliq startManager login=10.0.1.2 userName=admin passWord=secret
cliq startManager
```

startSnmpService

This command starts the SNMP Service.

Availability: Windows, SSH

Version: 9.0

Request Syntax


```
cliq startSnmpService login= userName= passWord=
```

| | | |
|------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |

Example

```
cliq startSnmpService login=10.0.1.2 userName=admin passWord=secret
cliq startSnmpService
```

startVirtualManager

This command starts a virtual manager on a storage system.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq startVirtualManager login= userName= passWord=
```

| | | |
|------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |

Example

```
cliq startVirtualManager login=10.0.1.2 userName=admin
passWord=secret
cliq startVirtualManager
```

stopManager

This command stops the manager on a storage system.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq stopManager login= userName= passWord=
```


| | | |
|------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |

Example

```
cliq stopManager login=10.0.1.2 userName=admin passWord=secret
cliq stopManager
```

stopSnmpService

This command stops the SNMP Service.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq stopSnmpService login= userName= passWord=
```

| | | |
|------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |

Example

```
cliq stopSnmpService login=10.0.1.2 userName=admin passWord=secret
cliq stopSnmpService
```

stopVirtualManager

This command stops a virtual manager on a storage system.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq stopVirtualManager login= userName= passWord=
```

| | | |
|--------------|----------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
|--------------|----------|---|

| | | |
|------------------|-------------|---|
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |

Example

```
cliq stopVirtualManager login=10.0.1.2 userName=admin passWord=secret
cliq stopVirtualManager
```

testCredentials

This command tests the login credentials for a management group.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq testCredentials login= userName= passWord=
```

| | | |
|------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |

Example

```
cliq testCredentials login=10.0.1.2 userName=admin passWord=secret
cliq testCredentials
```

unassignVolume

This command disassociates a volume from all servers.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq unassignVolume volumeName= login= userName= passWord=
```

| | | |
|-----------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |

| | | |
|-------------------|-------------|---|
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>volumeName</i> | Required | The name of the volume |

Example

```
cliq unassignVolume volumeName=TheVolume login=10.0.1.2
  userName=admin passWord=secret

cliq unassignVolume volumeName=TheVolume
```

unassignVolumeToServer

This command disassociates a volume with a server.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq unassignVolumeToServer volumeName= serverName= login= userName= passWord=
```

| | | |
|-------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>volumeName</i> | Required | The name of the volume |
| <i>serverName</i> | Required | The name of the server |

Example

```
cliq unassignVolumeToServer volumeName=TheVolume serverName=TheServer
  login=10.0.1.2 userName=admin passWord=secret

cliq unassignVolumeToServer volumeName=TheVolume serverName=TheServer
```

utility

This command executes a utility program on a storage system.

Availability: Windows, SSH

Version: 8.0

Warnings

This command is recommended for HP support only.

Request Syntax


```
cliq utility run= login= userName= passWord=
```

| | | |
|------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>run</i> | Optional | The utility and parameters to execute on the storage system - if this parameter is missing, a list of possible commands is returned |
| <i>logFile</i> | Optional | The name of the local file used to store the returned information |
| <i>useZip</i> | Optional | When used, the resulting log file will be zipped |

Example

```
cliq utility run="ping -c 10 10.3.2.1" login=10.1.2.3 userName=admin  
passWord=secret  
cliq utility run="ping -c 10 10.3.2.1"
```

vssSnapshot

This command snapshots volumes using the VSS requestor client (Windows only).

Availability: Windows 2003 and 2008 Only

Version: 8.0

Request Syntax

```
cliq vssSnapshot volumeName=
```

| | | |
|---------------------------|----------|--|
| <i>volumeName</i> | Optional | The name of the volume |
| <i>persistent</i> | Optional | Is the snapshot persistent? This can be one of: 0, 1 - default |
| <i>transportable</i> | Optional | Is the snapshot transportable? This can be one of: 0 - default, 1 |
| <i>backupDoc</i> | Optional | The name of the backup document file |
| <i>writerInfo</i> | Optional | Display information about VSS writers. This can be one of: status - writer status, metadataSummary - summary of the VSS writers, metadataDetail - detailed information on the VSS writers |
| <i>shadowInfo</i> | Optional | Display information about VSS shadow copies. This can be one of: all - show information on all shadow copies, <shadow Set GUID> - show information on shadow copies belonging to this shadow set, <shadow Copy GUID> - show information on this shadow copy |
| <i>deleteShadowCopies</i> | Optional | Delete VSS shadow copies. This can be one of: all - delete all shadow copies, <volume> - delete the oldest shadow copy of this volume, <shadow Set GUID> - delete all shadow copies in this shadow set, <shadow Copy GUID> - delete the shadow copy with this id |
| <i>excludeWriters</i> | Optional | List of writer GUIDs to exclude from the shadow copy |
| <i>includeWriters</i> | Optional | List of writer GUIDs to include in the shadow copy - if the writer is found to not participate in the snapshot, no snapshot will be taken |
| <i>runCommand</i> | Optional | Custom command executed after shadow creation, import or between break and make-it-write |
| <i>importShadow</i> | Optional | Transportable VSS snapshot import |
| <i>mountShadow</i> | Optional | Expose the shadow copy as a mount point or drive letter - the format of this is mountShadow="<GUID>;<mountOrDrive>" |

| | | |
|--------------------------|-------------|---|
| <i>breakShadowCopies</i> | Optional | Break the shadow copy set |
| <i>maskLun</i> | Optional | Mask the shadow copy LUN from the host. It works in conjunction with breakShadowCopies and is valid only when breakShadowCopies is specified (Windows 2008 only). |
| <i>snapshotName</i> | Optional | The name of the remote snapshot |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>description</i> | Optional | Optional description |

Example

```
cliq vssSnapshot
```

waitForEvent

This command waits for an alert or event message.

Availability: Windows, SSH

Version: 9.0

Request Syntax

```
cliq waitForEvent login= userName= passWord=
```

| | | |
|--------------------|-------------|--|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters userName/passWord or groupName must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters userName/passWord or groupName must be specified). |
| <i>receivePort</i> | Optional | The TCP port to receive the discovery packets (defaults to an unused port if unspecified) |
| <i>timetowait</i> | Optional | The maximum amount of time to wait before timing out. |

Example

```
cliq waitForEvent login=10.0.1.2 userName=admin passWord=secret
cliq waitForEvent
```

waitForUpdate

This command will block on a change to the state in the management group.

Availability: Windows, SSH

Version: 8.0

Request Syntax

```
cliq waitForUpdate login= userName= passWord=
```


| | | |
|--------------------|-------------|---|
| <i>login</i> | Required | The IP addresses or DNS-resolvable names of one or more storage systems |
| <i>userName</i> | Conditional | The authentication user name for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>passWord</i> | Conditional | The password for the storage system. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>groupName</i> | Conditional | The name of the management group with cached credentials. (Parameters <i>userName</i> / <i>passWord</i> or <i>groupName</i> must be specified). |
| <i>receivePort</i> | Optional | The TCP port to receive the discovery packets (defaults to an unused port if unspecified) |
| <i>timetowait</i> | Optional | The maximum amount of time to wait before timing out. |

Example

```
cliq waitForUpdate login=10.1.2.3 userName=admin passWord=secret
cliq waitForUpdate
```